Ingleby Lecture,

ON

PELVIC HÆMATOCELE,

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GENTLEMEN,—A trial which has recently taken place in Liverpool has given a special interest to the subject of hæmatocele, and that alone would justify me in taking up a considerable part of your time in discussing this extremely interesting subject; but, in addition to this, I desire to draw the attention of my professional brethren to this particular lesion, because it seems to me that the confusion which exists about it becomes deeper and deeper, and not only is there no justification for any confusion at all, but it may be very easily corrected. Our attention was drawn to the subject—in fact, it may be almost said that the question of hæmatocele was introduced to professional notice—by the appearance of a treatise on Diseases of Women by Drs. Bernutz and Goupil, translated by Dr. Alfred Meadows, and published by the New Sydenham Society in its English form in 1866. It appears to me that a more careful study on the part of writers of text-books on gynæcology of this very admirable treatise would have prevented very largely the confusion of which I have to complain. For instance, if we take one of the most recent text-books on gynæcology—that by Dr. Emmet of New York—we see that throughout the chapter on this subject this confusion is remarkably prevalent. It begins with the definition that hæmatocele is "an accidental collection of blood in the pelvis, either in the peritoneal cavity or outside the peritoneum, or within the connective tissue of the pelvis." The definition is faulty to begin with, because the second and the third varieties must of course be classed together, and to class under the same name—the common name of hæmatocele—two conditions which must be so absolutely apart as hæmorrhage within the peritoneal cavity and hæmorrhage outside it, is the very fountain and origin of all the confusion which has arisen. Dr. Emmet quotes Nélaton as having given the first accurate description of the pathology of the lesion; but, in reality, Nélaton's views, from the very words he coined to express them, are very largely answerable for the confusion. M. Nélaton regarded the origin of hæmatocele as being from the rupture of a Graafian follicle, the bleeding naturally gravitating from the surface of the ovary to the bottom of Douglas's cul-de-sac, the most dependent point, and for this the term he invented was "retro-uterine hæmatocele." On page 228 Dr. Emmet gives a diagram labelled a "retro-uterine hæmatocele," in which the section of the blood-clot is clearly enough placed behind the uterus; but a glance at it will show that such clot never could possibly arise from an ovary, so that either Dr. Emmet is wrong in his notions of the pathology or he has altogether misunderstood M. Nélaton. On p. 231 he gives a diagram which is really the diagram intended by Nélaton, but in which the blood-clot is peri-uterine, and not merely retro-uterine; and therefore the case in the second instance comes under the definition and title which we owe to Simpson.

Between the appearance of the first real essay on the subject by Bernutz in 1848 and the translation of his larger work in 1866 a great many contributions to the literature of this subject appeared, each of which advanced some peculiar theory on the subject, and to all of these there may be urged the objection that they were too exclusive, and they did not in any instance, as it appears to me, grasp the whole pith of the case. The word "hæmatocele" is a convenient though not very accurate term, and so long as it is limited to the idea of an effusion of blood it may be taken as the basis of our consideration. The moment, however, such terms as *true* hæmatocele and *false* hæmatocele were introduced confusion reigned supreme. Bernutz held that true hæmatocele consisted of an effusion of blood within the peritoneal cavity, whilst Simpson argued that it could never be an intra-peritoneal effusion. What I am inclined to advise, and for reasons that will be given immediately, is that the phrase "pelvic hæmatocele" ought to be retained to cover all effusions of blood which have their origin in the pelvis. This I advise because it would cover the vast majority of cases of effusion of blood into the peritoneal cavity, for if we exclude the results of traumatic lesion there are very few effusions of blood into the peritoneal cavity which have not a pelvic origin—a fact which is at once indicated by the extreme rarity of the occurrence in men. With this simplification we can look over the great bulk of the literature on this subject with a certainty of arriving at more logical conclusions than if we did not accept the limitation. Bernutz and all other writers agree in recognising the fact that any effusion of blood must be regarded rather as a symptom than a disease of itself, and this is true enough if we are discussing merely the etiology of the condition; but if we regard the condition in itself as an entity we certainly cannot accept this as a limitation, for, whatever the origin of the effusion may be, the moment the effusion is in existence it becomes in itself a disease, and sometimes an extremely severe one. But in the two great classes into which I am about to divide hæmatocele this is far more true about the first class than it is about the second, and this is the first indication that we get of the differences which are found to exist between the two classes. This difference is created *ab initio* by differences in the anatomical relations of the effusion.

In the pelvis—indeed we may take the whole abdomen, and say in the abdomen—an effusion of blood must be either within the peritoneum or outside it. And let us just speak for a moment on what the primary, what the initial result is in any effusion of blood under these two different circumstances. Let us take an imaginary case of rupture of a bloodvessel in the neighbourhood of the kidney by reason of a blow or other injury. Effusion of blood in that neighbourhood must of necessity be extra-peritoneal; it would travel through the cellular tissue, and by reason of the very fact that it had so to travel, provided there was no rupture of a vessel into the pelvis of the kidney, the effusion would be limited, the interstices of the cellular tissue would form the very best of all known hæmostatics, and I find it difficult to imagine that an effusion of blood—let us call it a hæmatocele—in the neighbourhood of the kidney could be so extensive as to be fatal, always supposing it was not a main trunk which had been wounded. But, on the other hand, if we imagine, from some cause or other, a bloodvessel of the kidney bursting into the cavity of the peritoneum, there would then be no natural hæmostatic to assist in the arrest of the hæmorrhage; the bleeding would go on indefinitely, and unless some means could be secured to assist nature in arresting that hæmorrhage, the patient would almost with certainty die.

Let us now take another illustration. Suppose that a small vein on the posterior peritoneal surface of the uterus were to rupture and to bleed into the peritoneal cavity, there the blood would of course naturally tend to coagulate, but not in the same way as when extravasated into the connective tissue. All of us who have experience in abdominal surgery know that when blood flows in quantity into the peritoneal cavity, probably by reason of its dilution by the lymph always present there and easily excited into excessive flow by any abnormal condition, it does not show much tendency to coagulate, save in a very fitful and fragmentary way. One of the most remarkable proofs of this is the influence of the drainage-tube in arresting hæmorrhage. If the cavity is kept dry by frequent withdrawal of the blood oozing from torn pelvic adhesions, the bleeding will soon stop; but if drainage is not kept up the bleeding will probably prove fatal. Supposing, on the other hand, that a small vein ruptured in the tissue and between the folds of the broad ligament, we should again have exactly the same condition as I have imagined to exist about the kidney; in fact, you would have it still more marked, for, in the first place, the cellular tissue through which the bleeding could permeate is much more limited in quantity than it is in the neighbourhood of the kidney. Again, we have a space between the folds of the broad ligament which is not capable of rapid distension to an indefinite extent; the broad ligament, when distended, forms a limited cavity, and we shall then have two processes by which the tendency to excessive hæmorrhage is arrested; the first is the natural tendency on the part of the interstices

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of the broad ligament to limit the bleeding; and, again, the pressure of the broad ligament itself, as a membrane distended and resisting further distension, exercises pressure upon the bleeding point, and becomes a powerful natural hæmostatic.

These anatomical considerations alone, were they supported by no other facts at all, would be enough to persuade us into an acceptance of the division, which has often been described but never precisely laid down by writers on this subject, of pelvic hæmatocele into the two classes of extra-peritoneal and intra-peritoneal, the former corrected and checked by two powerful agencies which are absent in the latter, whilst the hæmorrhage in intra-peritoneal hæmatocele is actually favoured by the dilution of the blood as it passes out of the bleeding vessels. The confusion which has arisen from the want of a recognition of the two classes of cases of intra- and extra-peritoneal may be seen by taking up any text-books on the subject and turning to the allusions which are made as to the frequency of the occurrence of hæmatocele or to its differential diagnosis, and still more to its treatment. Thus Dr. Emmet says: "If we limit the acceptation of the term 'hæmatocele' to an accumulation of blood passing into the peritoneal cavity, the accident is comparatively a rare one; but if it is held to embrace all blood accumulations in the pelvis, the occurrence is certainly a far more common one than the profession at large have any conception." If we accept the first sentence of this passage as alluding to intra-peritoneal hæmatocele, the statement is relatively correct; and if we accept the second sentence as referring to extra-peritoneal hæmatocele, the statement is absolutely exact; but if we go a few pages further on in Dr. Emmet's book, we find him attempting to make a differential diagnosis between hæmatocele—of which he has given no precise definition either for extra- or for intra-peritoneal effusion—and tubal pregnancy, and the confusion becomes positively amazing; for it will be seen as we proceed that for intra-peritoneal hæmatocele by far the most common cause is the tubal pregnancy, for which Dr. Emmet desires to find a differential diagnosis. This is what he says upon treatment: "Surgical interference has been advocated by many in its practice, and been urged as the necessary procedure at an early stage. Unquestionably cases must occur when the surgeon would be wanting in sense of duty if he did not assume the responsibility and puncture the mass. But with a large majority of cases such interference would be criminal, as it needlessly places the life of the patient in jeopardy." Here, again, what Dr. Emmet says is absolutely true about extra-peritoneal hæmatocele, and it is absolutely untrue about intra-peritoneal effusion. I only desire to say I have taken up Dr. Emmet as an example of this confusion in English writings because his work happened to be the first text-book on gynæcology which caught my eye on my book-shelf as I started to write this lecture. If we accept the anatomical and physical facts before alluded to as a basis, we shall find that it is not a difficult matter to reconcile a very large number of discordant facts and many discrepancies in the views of various authorities; in fact, the whole story of hæmatocele may be reduced from confusion into order. We shall find also that the two varieties of hæmatocele are different in their relative frequency, in their causation, in their history and course, particularly in their relative fatality—different in their symptoms and in the signs by which they may be diagnosed, and, finally, in their demand for surgical interference.

Dr. Bernutz has expressed an opinion, to which I have already alluded, that "the bloody tumour which is left as the remains of a hæmorrhage has no right to be regarded as a specific disease, apart from what has caused it." This is true, I hold, of intra-peritoneal hæmatocele, but not of the extra-peritoneal variety. When hæmorrhage into the broad ligament occurs, the arrest of the hæmorrhage has been brought about by nature's own methods almost before the accident has been diagnosed, and therefore all we have to do with is the thrombus, and in the great bulk of cases that may be, and generally is, let alone. But cases do arise, as I shall tell you by-and-by, when it becomes a serious disease. But if the sac of the broad ligament bursts out into the peritoneal cavity, the hæmostatic pressure is relieved, the bleeding goes on, the two forms of the lesion coexist, and the patient bleeds to death. I have seen no such case, but more than one is faithfully recorded by Bernutz. Such a case is recorded by Goupil, and is a perfect example of what I can fully believe to be possible, though I have never seen it, therefore I quote it at length.

S——, aged thirty-two, from a delay in menstruation, thought herself pregnant, and regarded a metrorrhagia which occurred as an abortion, though she had seen no trace of an ovum. On admission, the abdomen was distended and very tender on pressure, and it was resonant on percussion. The cervix was open, and the uterus was pushed somewhat to the left and forwards by an enormous swelling which was behind it. The posterior cul-de-sac was occupied by a fluctuating tumour, which was felt filling up the pelvis entirely, and the fluctuation was very distinct. The diagnosis was (and I regard it as one of the most brilliant on record) intra- and extra-peritoneal blood-tumour, probably accompanied by extra-uterine gestation. She gradually grew worse, and died on the third day after admission. She died because, in 1855, M. Nonat, under whose care she was, had not been infected by the restless spirit of surgery let loose since 1878, which has done so much to save cases such as this.

The post-mortem record of this case, however, is a perfectly peculiar record of facts. In the peritoneal cavity about twenty-five ounces of black fluid blood and clot were found, constituting the intra-peritoneal hæmatocele, the cause of the patient's death. When that was removed an ovoid tumour was observed covered by the peritoneum of the broad ligament. It seemed to be formed by a mass of blood. This was the extra-peritoneal hæmatocele. At the bottom of the left recto-uterine cul-de-sac, the peritoneum forming the posterior layer of the broad ligament presented a perforation with a communication between the recto-vaginal cul-de-sac and the cellular tissue, separating the peritoneal layers of the left broad ligament. On making an incision into the ovoid tumour, a small fœtus was discovered.

The importance of this record cannot be over-estimated, for it shows, as I shall tell you afterwards, how some cases of broad-ligament hæmatocele arise. It shows that broad-ligament hæmatocele may occasionally be fatal by becoming intra-peritoneal hæmatocele, and it shows us (this case has shown me) how twenty-four out of twenty-five of such cases may be saved from death. Further, it proves, what is perhaps not very pertinent to the present discussion, that the views I have advanced about the tubal origin of all extra-uterine pregnancies are correct. The only other case of this kind familiar to me is one very imperfectly narrated by Duverney as having occurred in 1712. These two cases are all the records I have found of the coincidence of intra- and extra-peritoneal hæmatocele, and the combination was due in both instances to rupture of a broad-ligament pregnancy with hæmorrhage into the peritoneum. Both cases ended fatally by reason of the hæmorrhage into the peritoneum. I have seen dozens of cases of broad-ligament hæmatocele, and have never met with a fatal one. I have seen over fifty cases of intra-peritoneal hæmatocele, all resulting in death, save those (with one exception) in which I have performed abdominal section for the purpose of obviating death; so that we find a very wide difference in the results of the two classes of cases in my experience. It will also be found that when the real difference between the varieties is understood, it will explain all the discrepancies in the views held by various authors, and all the confusion will cease.

I propose to deal first of all with the extra-peritoneal hæmatocele, and to give first in detail a case which proves in every way its character and relations, and which illustrates also one of the exceptional instances in which it requires to be interfered with.

C. T——, aged twenty-six, was placed under my care in December, 1883, by Dr. Faussett of Tamworth, on account of a large ovarian tumour. I operated on Jan. 3rd, 1884, and removed a cystoma of the left ovary weighing about 14 lb. There were no adhesions, the pedicle was long and thin, and the operation was as easy as possible. A metrostaxis appeared about twenty-four hours after the operation, as is usual after such operations, the only peculiarity in this instance being that the loss was very abundant. It suddenly ceased after being present for about twelve hours, and immediately the patient was in great pain. From having seen the same accident under similar circumstances very frequently, I knew at once what had happened. I examined and found, as I suspected, a large hæmatocele of the left broad ligament. The hæmatocele increased slowly in size until a tumour could be felt above the brim of the pelvis, and the patient suffered greatly. I also found that the rectum was completely blocked, as I had seen it often before, by a stricture caused by the effused blood dissecting round the

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rectum outside the peritoneum. This is one of the signs of broad-ligament hæmatocele which has not yet been noted by any writer with whose work I am acquainted, and it is of great importance. It does not—indeed, it cannot—occur in an intra-peritoneal effusion. In the case of C. T——, I tapped the hæmatocele from the vagina and drew off a large quantity of tarry blood; but in fourteen or fifteen hours the sac had filled again and the patient had become exsanguine. I therefore reopened the abdomen, opened the distended cavity of the broad ligament, emptied out the blood fluid and clots, sponged it out with vinegar-and-water, fastened the edges in the aperture to the edges of the parietal wound, and placed in a drainage-tube. The patient then made a rapid recovery. I only want you to note that this second operation made it absolutely certain that the effusion was in the cavity of the broad ligament and not in the peritoneal cavity, for the peritoneal covering of the blood mass was perfectly free from adhesions, and its entire relations could be made out with the greatest ease, quite as easily as if it had been a post-mortem instead of an ante-mortem examination.

Speaking of a series of cases by Nonat, M. Bernutz says, very quaintly, that there should have been at least one necropsy, in order to demonstrate the legitimacy of the different diagnoses—that is, between what he calls true (intra-peritoneal) and spurious (extra-peritoneal) hæmatocele. But these five cases recorded by M. Nonat are precisely in point in the present discussion, for four of them were diagnosed by that eminent gynæcologist as being the subjects of extra-peritoneal effusion, and they all recovered, whilst the patient in whom he diagnosed intra-peritoneal hæmorrhage died, and M. Bernutz was gratified by an accurate post-mortem record. Nothing could prove more satisfactorily than this what I contend for, that it is the anatomical relations of the two kinds of hæmorrhage which make all their differences; and now that we examine them carefully before death, and by that very examination prevent death by curing them, we get the first corroboration of all that M. Bernutz has said.

Of extra-peritoneal hæmatocele there are only two causes known to me, one very common and one very rare. The first is sudden arrest of a metrostaxis, which may either be normal menstruation or the pseudo-menstruation which occurs so constantly after abdominal operations. The case I have just detailed is a typical example of what occurs very often after any operation on the broad ligament, and to the inexperienced surgeon is a fertile source of worry. The accident is always indicated by the sudden access of pain, and often an alarming feeling of faintness. The pulse always rises, and sometimes the temperature does so too. On examination the uterus will be found to be fixed on one side, sometimes on both, and this occurs with a suddenness that puts inflammatory effusion out of the question altogether. In the majority of cases the effusion is not extensive enough to be felt above the brim of the pelvis; but in severe cases it is, and then it forms a rounded and distinctly limited tumour, with a feeling of distinct fluctuation. I cannot form any exact estimate of how many cases of these operative hæmatoceles I have seen, but it certainly is not less than fifty, and is more likely to be seventy or eighty, and I have been induced to meddle only with the one I have narrated. In every case in which I have diagnosed the condition the patient has recovered, and in the necropsies which have been made upon cases operated upon by me no record of the incident occurs, so that I conclude it is an accident very nearly if not quite devoid of mortality. Its only drawback is that it delays convalescence for ten or fourteen days, and otherwise I believe it to be of no account at all.

Extra-peritoneal effusion of blood is also very common apart from cases of operation, but by reason of the same sudden arrest of a metrostaxis. Its symptoms in such cases are very much what I have described—sudden pain, a feeling of faintness in severe cases, with a rise of pulse. On examination, the uterus is felt fixed and generally pushed forwards, with a boggy swelling behind or on one side of the uterus, and, if the effusion be large, the mass is felt distinctly limited by the distended broad ligament above the pelvis, this latter condition being the essential diagnostic difference between the two varieties of hæmatocele. An intra-peritoneal hæmorrhage unlimited in quantity or by membrane has never yet been felt by me as a defined tumour above the brim, and I have now had a large experience of such cases, confirmed by operation or post-mortem examination.

Cases of effusion of blood into the broad ligament by sudden arrest, or at least associated with sudden arrest of menstruation, are very common, and I am sure that large numbers of these occur without the patients thinking it worth while to ask for medical assistance, and they get quite well without it. It is, as I have said, a condition probably almost free from primary mortality, and has only a remote secondary mortality when the thrombus breaks down and suppurates, and brings about the tedious condition of pelvic abscess.

Effusion of blood into the broad ligament occurs from another cause, much more rare and probably much more fatal, certainly much more serious—I mean rupture of a tubal pregnancy about the twelfth week of its existence. It is now pretty well admitted that the scheme of the pathology of extra-uterine pregnancy which I advanced some ten years ago covers and explains all the facts of that curious condition, and now it is capable of being used to help us to understand pelvic hæmatocele. Briefly, this view is that impregnation under normal conditions can and does occur only in the uterus. So long as the ciliated epithelium is in action in the tubes, spermatozoa cannot enter them, and the ovules cannot adhere to their walls. But the moment an ovule reaches the cleansed and fresh endometrium infiltrated with spermatozoa, its adhesion occurs. Destruction of the ciliated epithelium of the tubes by desquamative salpingitis reduces the internal tubal surface to the condition of the endometrium, and then entrance of the spermatozoa, impregnation, and adhesion of the ovum are possible, and we have the occurrence of tubal pregnancy. The tube is distended by the growing ovum, and, as it is not capable of indefinite distension, it ruptures, and the seat of rupture seems to be determined by the site of the placenta, where the sinuses have so channelled the walls as to weaken them greatly. A glance at a section of a Fallopian tube will show at once that there are two areas in that section which will severally give very different results, as one or other of them is the site of the rupture. One is much the smaller of the two, and is situated between the layers of the broad ligament, forming, as it were, an ideal roof to the cavity of that space. Rupture here of course means that hæmorrhage occurs into the cavity of the broad ligament, and that an extra-peritoneal hæmatocele results. Such a case may, as I have already proved from Bernutz, become fatal by a further rupture of the broad-ligament cysts and hæmorrhage into the peritoneal cavity. But I feel sure that the great majority of these cases end then and there by the natural cure as mere extra-peritoneal hæmatoceles; the ovum dies and everything is absorbed. I am quite sure I have watched several cases of this kind. In rare exceptions the ovum is not killed, but develops into a broad-ligament pregnancy, formerly known as the "sous-peritoneo-pelvienne" variety of Dezeimeris. I have had seven cases of this kind which I have operated upon, saving six of the mothers and three of the children. Every one of the cases of extra-uterine pregnancy operated upon at or after the full time with which I am familiar comes easily within this explanation, and it makes what is an otherwise wholly unintelligible jumble in physiology as well as pathology quite simple.

The conclusions therefore are that, save under three sets of circumstances, extra-peritoneal hæmatocele is an accident perfectly free from danger. These are—(*a*) when a secondary rupture of the cyst occurs with continued bleeding into the peritoneum; (*b*) when it is merely a stage in the growth of an extra-uterine pregnancy; (*c*) when it goes on to suppuration. I have now to speak of this third condition.

I do not think that suppuration of a broad-ligament hæmatocele is very common, and yet I have met with quite a large number of cases. Of course by the ordinary methods of proceeding, and those which certainly ought to be adopted in the milder cases, it would be very difficult indeed, if not impossible, to make anything like an exact differential diagnosis between a suppurating hæmatocele of the broad ligament and several other conditions which I need not specifically allude to, and therefore any assertions concerning them, after dealing with them as they used to be, and as I say they ought to be dealt with in the majority of instances, by tapping from the vagina, may easily be met by the criticism adopted by M. Bernutz against M. Nonat, that at least one necropsy ought to be in existence to prove the assertions. I have, however, already pointed out that an abdominal section performed before death is for such a purpose as this quite as satisfactory as a post-mortem

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examination. In the 63rd volume of the Transactions of the Royal Medical and Chirurgical Society, I published a series of six cases in which I had adopted, for reasons of extreme seriousness, an abdominal section for dealing with pelvic abscesses which otherwise would have opened out in the usual disastrous ways. I say there that "these six cases have all been, so far as I could discover, cases of suppuration occurring in pelvic hæmatoceles," and I may at once dismiss this question with saying briefly that this depended upon the fact that in clearing out the cavity of the abscesses I removed a considerable quantity of laminated, broken-down old clot. Of these cases I select only one as a characteristic example, to illustrate alike the pathology and the treatment of these cases. Anyone who desires to obtain further information on the subject will find it at page 344 of the last edition of my book on Diseases of the Ovaries.

The patient in this case was sent to me by Dr. Flynn of Birchills. She was forty-five years of age, and had never been pregnant, save one doubtful miscarriage soon after marriage, nineteen years before. Symptoms resembling those of hæmatocele had occurred eight months before I saw her, and since that time she had been losing flesh, had lost her appetite, was troubled by constant thirst and night sweats, and had a rising night temperature. The uterus was fixed in a mass of effusion occupying the left broad ligament, and partly the right one also, and the mass on the left side encircled the rectum, forming a pronounced stricture, as hæmatoceles of the left broad ligament frequently do. No point of fluctuation could be felt in the pelvis, but the symptoms pointed clearly to the presence of pus. I therefore determined to open the abdomen, and readily obtained the consent of my colleague to this proceeding. On reaching the peritoneum the two layers were found to be adherent, so that the cavity was not opened. A large abscess was opened just behind the base of the bladder, between which and the uterus it principally lay, but stretching round behind the rectum. The floor and posterior wall of the abscess were found to consist of organised blood clot, so that its origin had been in a blood effusion into the broad ligament. A glass drainage-tube was inserted, and this was changed for one of Chassaignac's wire tubes on the eleventh day after the operation. She sat up on the twenty-first day, and the tube was finally removed on the twenty-sixth. She went home on the thirtieth day, perfectly well, and has remained so ever since, now nearly six years.

About thirty of such cases have been operated on by me, and all have recovered. I say about thirty, because I could not be sure that all these cases of pelvic abscess originated in suppurating hæmatocele, though the facts prove that the majority of them did so; and therefore I conclude that extra-peritoneal hæmatocele, though rarely fatal, has serious consequences in a fairly large proportion of cases.

How different it is with intra-peritoneal hæmatocele you shall shortly hear. My first experience of it was one of the saddest things I have ever known. A young married lady, one of the most charming and brilliant of women, the daughter of an author known wherever the English language is spoken, the wife of one of the most brilliant of surgeons, died after a few hours' illness, and on post-mortem examination a ruptured tubal pregnancy was found to be the cause of an enormous intra-peritoneal hæmatocele.

Another case I shall give in detail, because it was the cause of a complete revolution in my mind concerning the treatment of such cases, and because it may serve as an epitome of nearly all that could be told concerning these cases up to the time of its occurrence.

In the summer of 1881 I was asked by Mr. Hallwright to see with him in consultation a patient who had arrived by train from London in a condition of serious illness, that illness having been diagnosed by Mr. Hallwright as probably hæmorrhage into the peritoneal cavity from a ruptured tubal pregnancy. The patient was blanched and collapsed, the uterus was fixed by a doughy mass in the pelvis, and there was clearly a considerable amount of effusion in the peritoneum, but no distinct tumour could be felt above, and I agreed with Mr. Hallwright as to the nature of the lesion. This gentleman made the bold suggestion that I should open the abdomen and remove the ruptured tube. The suggestion staggered me, and I am ashamed to have to say I did not receive it favourably. I saw the patient again in consultation with Mr. Hallwright and Dr. James Johnson, and again I declined to act upon Mr. Hallwright's request, and a further access of hæmorrhage killed the patient. A post-mortem examination revealed the perfect accuracy of the diagnosis. I carefully injected the specimen which was removed, and I found that if I had tied the broad ligament and removed the ruptured tube I should have completely arrested the hæmorrhage, and I now believe that had I done this the patient's life would have been saved.

During the twenty years which had elapsed between this case and the first I have mentioned I had seen at least twenty-three other cases of a similar kind, and therefore I can entirely confirm what M. Goupil says of these cases to this effect: "So frequent is the occurrence of intra-pelvic" (and by this he means the true or intra-peritoneal) "hæmatocele, that I have made an analysis of forty-two of my cases which are irrefutable as to their diagnosis." He gives as the causes of these cases: 1. Hæmorrhage caused by the rupture of dilated utero-ovarian veins. 2. Hæmorrhage from rupture of the ovary. 3. Hæmorrhage caused by rupture of the Fallopian tube. 4. Hæmorrhage from the fœtal cyst itself having ruptured; and he says, "the largest number of cases fell under the last head." 5. Hæmorrhage within the fœtal cyst. Probably now M. Goupil would group the last three causes under one head—at least, I certainly should. At another place he says that ruptured tubal pregnancies are very common; for, according to Nonat, Baudelocque saw five examples in three months, and I know that anyone who makes a research in our serial literature will find them in abundance. The final argument as to their not being so rare as our text-books seem to assert is the fact that between January, 1883, and July, 1886, I operated upon twenty-five cases, and succeeded in saving twenty-four of them—a very striking contrast to the old plan of letting them alone to die. I have never seen a case of suspected rupture, or one in which we suspected extra-peritoneal effusion of blood, recover. As to the causes of intra-peritoneal hæmorrhage, I can only speak of two from personal experience; the first, and by far the more common, being ruptured tubal pregnancy. The second is hæmorrhage from some torn adhesions or badly tied vessel after an abdominal section. Thus I tied the pedicle of one ovarian tumour with catgut, and the patient died on the fourth day after the operation. I found a large intra-peritoneal hæmatocele due to the digestion and loosening of the ligature. In searching the literature of this question, I have found one case due to the rupture of an aneurysm of the cœliac axis, and a large number of cases having a traumatic origin, chiefly from rupture of the liver. Bernutz and Goupil have collected a few instances due to rupture of dilated uterine and ovarian veins, not connected with pregnancy; also two cases of rupture of the ovary in pregnancy. But everywhere the evidence is overwhelming that the most fertile source of this most fatal accident is rupture of a Fallopian tube dilated by a fertilised ovum. In very many of these cases a feature of great interest is the fact that the first attack of hæmorrhage is not fatal, and that the records yield incontestable evidence that it may require the repeated occurrence of bleeding to bring about the fatal issue. In some these attacks of hæmorrhage seem to have been separated by long intervals. Thus one case recorded as having occurred in the Maison d'Accouchement in 1816, where the history makes it evident that the tubal rupture occurred at the usual time, in the third month; the fatal hæmorrhage did not occur till the sixth month of extra-uterine gestation. In this case the fœtus was found, so that there could be no doubt as to the nature of the case.

But in some of the instances recorded by Bernutz and Goupil themselves—and I prefer their facts to all others, being, as they are, so carefully sifted and so free from any effort to theorise—it seems to me that the history was that of tubal rupture, repeated hæmorrhage, absorption of the gelatinous fœtus, and final death from hæmorrhage; so that when the post-mortem was made, the absence of a fœtus, which the authors note, blinded them to the real nature of the case. That the fœtus may disappear by absorption is made certain by my own experience. I have removed it only twice in my twenty-five cases, though I have found the placenta in every one. Thus Case 32 in the work of Bernutz and Goupil is an instance of fatal intra-peritoneal hæmatocele due to a ruptured Fallopian tube, which was distended by a tumour the size of a pigeon's egg. I have no doubt that a microscopic examination of that tumour would have shown it to have been a placenta. I think that this explanation applied to many of the carefully recorded cases of these distinguished French authors, in which the details given would incline us to characterise them as

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being identical with that which was the subject of the recent trial at Liverpool There are half-a-dozen cases in Bernutz's book which are identical with that case, except that they were all fatal, whereas the Liverpool case was successful. That woman's peritoneum was occupied by a quantity of blood-clot and blood-serum so great that it could be recognised by palpation before the operation. One of the Fallopian tubes was the source of the hæmorrhage, because it had a quantity of blood and blood-clot in it when removed. Here is a case almost identical, taken originally from THE LANCET of 1848: "A woman aged twenty-eight was suffering from rheumatism, when she was suddenly seized with nausea, vomiting, and pain in the right side of the abdomen; her face became anxious and pallid, the pulse imperceptible, the extremities cold, and the respiration oppressed; in short, collapse was complete, and she died in twenty-four hours, evidently from internal hæmorrhage. On opening the abdomen a quantity of blood was seen, but no rupture of any of the viscera could be detected. In the pelvis a clot was found in the left Fallopian tube. On separating the uterus, its cavity was filled with muco-sanguineous fluid and lined with a decidual membrane. The left tube contained a clot of blood the size of an almond. About an inch from the uterus at the upper part of this tumour was a rent, and within a small sac, so compressed and deformed by the clot that it was impossible to say whether or not it was an ovum. The left ovary was the size of an apple, filled with blood and ruptured."

Another case, on the authority of Dr. Tilt, is given by Bernutz at page 196:—"A multipara, aged thirty-seven, was seized with lumbar pain; the menses were four days late; the left hypogastric region became tender, and soon tympanites and vomiting followed. She succumbed in ten days. On post-mortem examination there was general peritonitis; a large clot of blood filled the left iliac fossa and pelvic cavity; the uterus was normal in size and the appendages on the right side healthy; the left half of the uterus and its appendages were larger and more distended than the right; the Fallopian tube midway was the size of a nut; a probe introduced at the fimbriated extremity passed into a cavity in the centre of the clot, which dilated that portion of the tube."

Another, on page 197, is to the same effect:—"On post-mortem examination all the abdominal organs were observed to be quite healthy, but very bloodless. In the pelvis a large quantity of blood was discovered, clotty and fluid. After careful examination of the principal bloodvessels, arterial and venous, without discovering anything abnormal, the uterus was examined, together with its appendages, and the source of the hæmorrhage was soon apparent, a small rupture of the right Fallopian tube being discovered at about half an inch from its distal extremity; blood was oozing from it, and it was evident that this was the seat of the bleeding; the tube itself was also a good deal enlarged."

Dr. Goodell also gives a fatal case where a death occurred from about eight pounds of blood being lost from the Fallopian tube, though there was no evidence of a tubal pregnancy.

Case 11, given by Bernutz (p. 208), is extremely instructive, because it is a fatal case of hæmorrhage from the Fallopian tube in a young woman aged twenty-two, due apparently to measles. "On post-mortem examination hæmorrhage was found to have proceeded from the left Fallopian tube, which was distended to the size of the index finger, and containing about two ounces of blood, partly fluid, partly coagulated, and through the abdominal orifice as much as sixteen ounces of blood had escaped into the pelvis. These samples of hæmatocele, occurring in rubeola, scarlatina, and variola, demonstrate that this accident may occur in any severe fever."

Finally, I wish to refer you to a case originally contributed to the *London and Edinburgh Monthly Journal* for 1841, because it establishes beyond all doubt that fatal hæmorrhage can occur from the Fallopian tube into the peritoneum under circumstances when the occurrence of rupture of the tube by an ovum is out of the question. An illustration of the tube is given. "A large quantity of blood was effused into the abdomen and pelvis, mostly coagulated but partly fluid. At first it was impossible to say whence all this blood came, but on examining the pelvic viscera solid coagula was observed protruding from the open orifices of the Fallopian tubes. The tubes themselves were filled with blood and distended at a short distance from the uterus up to the distal extremity. The condition of the parts is very well shown in the accompanying sketch, which represents the serious state of one of the tubes and the appearance of the clot attached; the latter has a sort of lobulated appearance, produced by the constrictions exerted upon it in its passage along the tube. The other tube was the same. The greater part of the blood found in the pelvis escaped from the tubes no doubt in a fluid state, but that which was attached to the tubes was coagulated before it left the canal, as is evident from its shape."

Concerning the prognosis of such cases Goupil says: "It is but too true, I fear, that we are authorised in saying that all the cases of intra-peritoneal hæmorrhage arising from extra-uterine pregnancy end in death—in fact, all the cases that I have quoted have terminated in death; generally it has taken place in a few hours or days, and though death has been delayed for six months (as in the case already quoted) it is wholly exceptional." This was absolutely true in my own experience, till I was emboldened—shall I say till I was shamed by Dr. Hallwright's cases?—to open the abdomen and save their lives.

We come, then, to the following conclusions: That in the great majority of cases of extra-peritoneal hæmatocele the disease may be left alone, being rarely fatal, and that it is to be interfered with only when suppuration has occurred. That, on the contrary, intra-peritoneal hæmatocele is fatal with such almost uniform certainty that so soon as it is suspected the abdomen must be opened and the hæmorrhage arrested. In the overwhelming majority of cases the source of the hæmatocele will be found in the broad ligament, and then it can be dealt with, and with every prospect of success. If anyone objects to this, I appeal again to the canon of surgery, which is of uniform application. For surgical hæmorrhage cut down and tie the bleeding point; if a big branch of the femoral artery were bleeding, my colleagues who deal in such cases would cut down and tie it. Why should Poupart's ligament be a line of demarcation within which this surgical writ will not run? Why should my friend Dr. —— be allowed to do to the external iliac artery what I am prohibited from doing to the internal iliac division? Indeed, at page 202 of Bernutz and Goupil's work they assert this principle: "The indication in such a case is plain—we must stop the hæmorrhage."

MASKED HEART DISEASE.[1]

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"MEN observe when things hit, and not when they miss," says Bacon; and medical men are no exception to the rule. Much, however, may be learnt by the leisurely reconsideration of errors in bedside investigation. With this view I propose to take for my text certain cases of heart disease, in which necropsies have subsequently shown the imperfections of the clinical diagnoses. With our present aids to the proper investigation of disease, the various lesions of the heart which are commonly met with in practice can be in most instances differentiated with considerable accuracy. There will nevertheless remain cases that, from causes I shall hereafter recapitulate, may be overlooked or mistaken by the most careful observer.

Heart disease may be masked in a patient by one of the following reasons:—1. The conventional signs of disease of the organ may be altogether absent. 2. The auscultatory or other evidences of cardiac disorder may point to lesions other than those actually present. 3. Finally, the signs of heart disease may be so masked or obliterated by urgent local symptoms developed elsewhere as to be overlooked during the life of the patient. I shall not attempt to assign too closely under any one of these headings the causes of a faulty diagnosis in the cases I shall hereafter mention. In practice, two or more of these reasons will generally be found to operate conjointly in the production of the error. Whilst classifying the cases under one or other of the above divisions, let it therefore be understood that I have

[1] Read before the Brighton Medico-Chirurgical Society, Feb. 1886.

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only selected the most prominent cause of the oversight in each instance.

Pathologists and physicians generally admit that there are many serious cardiac lesions which with our present lights must remain conjectural during the patient's life. According to Dr. Fagge,[2] in cases of cerebral hæmorrhage enormous *hypertrophy of the heart* may occur without any clinical evidences of such a condition. The organ seems to bury itself within the hollow of the left lung, and the area of dulness is consequently not increased. I have met with several cases of considerable enlargement of the heart which were unnoticed at the bedside, and I shall refer to some of them subsequently. It seems probable that several causes may operate to mask this enlargement during life. *Fibroid disease of the heart* is also frequently unaccompanied by any distinguishable signs of cardiac incapacity. The same author states that in three of the twenty-seven cases he had collected the patient died of some other cause. *Aneurysm of the heart* is seldom diagnosed clinically; and the symptoms of true *fatty degeneration* are very obscure.[3] It may be doubtless assumed that a patient who suffers from faintness, dyspnœa, and lividity, who has a weak, irregular pulse, and in whom there is an indistinctness of the first cardiac sound, may have this lesion. There will nevertheless remain a large percentage of sudden deaths from fatty degeneration of the heart wherein the cardiac changes were unsuspected until they were revealed at the necropsy. Finally, *adherent pericardium* may exist without being detected by any definite physical signs.[4] I shall here narrate a case under my care:—

S. W—— became an in-patient in 1883. He then suffered from orthopnœa and sickness. His pulse was extremely rapid and irregular. On examining the chest the area of cardiac dulness was found to be greatly increased downwards and to the left. A blowing systolic murmur was heard at the apex, and a loud clanging sound at the base over the aortic valves. There was a history of three attacks of acute rheumatism. A fortnight after admission he died. A post-mortem examination showed numerous old adhesions in the pleural cavities, especially the right; and a thin firmly adherent pericardium over the anterior and lateral walls of the heart. There was an enormous heart, weighing 30 oz. All its cavities were dilated, particularly the left, which were also hypertrophied. The mitral and aortic valves were thickened and flexible, but there was no vegetations. Both the calibre of the aorta and that of the pulmonary artery were greater than natural. The semilunar valves of the former, however, were apparently adequately enlarged, and it was doubtful whether there had been any incompetence during life. In this case, I acknowledge that my diagnosis was in many respects at fault. The pericardial adhesions were quite unsuspected by me whilst the sufferer was alive. Upon carefully reconsidering the symptoms of the case by the after-light cast upon them at the necropsy, I think the adherent pericardium was really the starting-point of all my patient's subsequent cardiac troubles. The heart, hampered in its action by being glued, as it were, to the anterior walls of the chest, at a time when it is probable that its walls were weakened by the existence of some myocarditis, was unable to carry on the work of the circulation as it had previously done; dilatation and compensatory hypertrophy accordingly followed closely upon the first lesion. These muscular changes were, I take it, a consequence of the pericardial adhesions, and not of any valvular deficiency, for the latter structures were flexible and smooth, and could not have offered any great impediment to the proper circulation of the blood through the various orifices. Towards the end of life there was probably regurgitation through the mitral orifice, but the aortic cusps seemed to be competent at the time of death.

Many authorities on heart disease (of whom Dr. Balfour is one) hold that pericardial adhesions do not produce hypertrophy—that when hypertrophy arises in such cases it is due to other, probably valvular, causes. In the case to which I have briefly alluded, it would seem to be a distortion of fact to fit a preconceived theory, if we are to believe that the great cardiac enlargement was due to the comparatively trifling valve disease observable. The frequency with which inflammation of the visceral layers of the pericardium are associated with a superficial myocarditis, and a consequent degeneration of the muscular substance of the heart may assist, as I before stated, in weakening the walls of the organ, and in paving the way to their future dilatation. I will narrate a second case:—

E. D——, a laundress, aged twenty-two, was admitted on September 4th, 1885, suffering from the effects of chill during convalescence from an attack of acute rheumatism two months previously. On the day following admission, the area of cardiac dulness was considerably increased, and for a few hours a rough friction sound was heard over the aortic valves, where the endocardial sounds were indistinctly audible. There was also evidence of fluid in both pleural cavities, and a blowing systolic murmur was heard over the scapular regions. Eight days afterwards the area of cardiac dulness was normal; the friction sound had disappeared, and the heart sounds were heard loudly over the front of the chest. The systolic murmur remained unchanged. It was now impossible to diagnose from the physical signs the previous pericardial inflammation. The patient, however, did not improve in health; the dyspnœa from which she had been suffering became more urgent, and she died two days subsequently. At the necropsy, besides pulmonary and pleural lesions, to which I need not here allude, both surfaces of the pericardium were everywhere coated with soft, rough lymph, which stripped off readily, leaving the serous membrane smooth and injected. There were also a few fibrous vegetations on the free edges of the mitral and aortic valves. The heart was not enlarged. In this case a universal pericarditis was present, and for two days before death there were absolutely no physical signs by which such a pathological condition could be diagnosed. The sudden disappearance of the abnormal sound over the præcordia was, I suppose, due to the more or less close agglutination of the two roughened surfaces of the pericardial sac during the last days of life, although the softness and slight consistency of the false membranes could only admit of a feeble cohesion between them.

The conventional evidences of one form of heart disorder are occasionally replaced by others associated usually with pathological changes of a different nature. Sietz[5] first noticed that the movements of an enlarged heart are sometimes attended with "to-and-fro" sounds simulating the rub of pericarditis, and this observation of his has been confirmed by Walshe and Fagge. I have not met with a case of this kind. It is, however, worth while to remember that these abnormal rubbing sounds may exist without inflammation of the serous membrane. I shall allude to the possible etiology of this phenomenon hereafter. Amongst the cases of which I have notes there are two I shall briefly notice in connexion with this division of my paper. They are both cases of mitral stenosis of the so-called "button-hole" lesion.

E. R——, aged thirty-three, a single woman, was an in-patient suffering from jaundice due to impacted gall-stones. There was also a history of old heart disease. On admission, nineteen days before her death, the heart's apex was three-quarters of an inch inside left nipple vertical. Action rapid and irregular. No murmur. These signs continued the same until death. At the necropsy the heart weighed 18 oz. The left cavities were especially dilated and hypertrophied. The mitral orifice was greatly contracted, and the valves thickened with soft easily detached vegetations along the free edges. The aortic valves were competent. A tuft of vegetations was attached to the ventricular surface of each corpus Arantii. No ulcerations of the walls of the ventricles or of the cusps. The valves were not thickened. Muscular tissue somewhat soft.

The other case was that of a woman about fifty, who was admitted with right hemiplegia. The heart's action was extremely irregular and rapid. There were no murmurs, and no definite signs of enlargement. The necropsy, a few days afterwards, showed hæmorrhage into the basal ganglia, and a well-marked "button-hole" mitral valve: the opening in its midst scarcely admitted a finger-tip. I have unfortunately mislaid the notes of this case, and I can only speak from memory. The facts, as far as they go, may, however, be accepted as true.

In both cases great stenosis of the mitral orifice existed without this condition of the valves giving rise to any præsystolic or other murmur. The only symptom of importance common to the two cases was the rapid and irregular action of the heart. The condition of the patients, who were both extremely feeble at the time of admission, may have assisted in modifying the physical signs.

[2] Principles and Practice of Medicine, vol. ii., p. 24.
[3] Ibid., p. 39. [4] Ibid., p. 41.
[5] Deut. Arch., xi., xii.

It often happens in practice that the clinical evidences of heart disease are masked or hidden by the conspicuous break-down of some neighbouring organs. The lungs are the organs which most frequently produce this complication. I have notes of three cases of hypertrophy and dilatation of the left cavities, in which no definite signs of such a condition were noticed during life.[6] This so far agrees with what Dr. Fagge *(vide supra)* has written on the subject. The only symptom I can find common to them all was dyspnœa—suffocating attacks of shortness of breath,—which came on with varying frequency for several days before death. In all the cases there was a considerable quantity of fluid in the pleural cavities, and the lung tissue was collapsed to a greater or less extent. (In one case a portion of the right lung was "carnified.")

The generally accepted doctrine as to the etiology of dyspnœa in such cases is ably expounded by the late Dr. Fagge.[7] In enlargement of the left heart slight excitement or exertion on the part of the patient will produce an altogether disproportionate increase in the rate of the pulse, with at the same time a sensation of dyspnœa. Dr. Fagge explains these peculiarities as follows:—"In spite of its augmented frequency, the heart, after all, fails to forward the blood through its left chambers with needful rapidity; there is therefore an accumulation in the pulmonary vessels, and the right ventricle has to make increased efforts to propel its contents onwards. And as the result is a state of the pulmonary circulation identical with that which is produced in other cases by a deficient supply of air to the lungs, it is not surprising that the same feeling of shortness of breath is experienced." This explanation implies that the dyspnœa in these cases is associated with engorgement of the pulmonary vessels. I must take exception to this view, as one which is not applicable to two of the three cases I am here considering.

Physiologists assume, in calculating the work done by the heart, that in the healthy man the ventricles empty themselves of blood at each systole. We may probably accept their conclusions founded on this assumption when they deal with an organ of normal capacity. These data are, I think, erroneous when applied to an enlarged heart, especially when the enlargement is associated (as is mostly the case) with dilatation of the left ventricle. The solid contents of spheres vary directly as the cubes of their radii. If we take a distended heart cavity to roughly represent a sphere (the actual shape of the cavity does not greatly affect the result), we can readily understand how a very slight augmentation of its mean diameter will largely increase its capacity. For example, a ventricle with the capacity equal to the volume of a sphere of one-inch radius will contain, when distended, about four cubic inches of blood. If we now take a ventricle having a capacity equal to the volume of a sphere of two inches radius, the contents of such a chamber would be upwards of thirty-three cubic inches; that is to say, the heart, if it emptied itself at each systole, in the former case would propel only one-eighth the quantity of blood that it would do under the latter circumstances. It must be within the experience of most of us to have frequently examined hearts the mean diameters of whose chambers, if not double their normal size, were at all events greatly increased. Now the carrying capacity of such dilating hearts increases at a far more rapid rate probably than their propelling power—that is, than any compensatory hypertrophy of the muscular walls would be capable of adequately dealing with. The overtaxed ventricles of such enlarged hearts never quite empty themselves. There follows a condition of engorgement, not of the lungs in the first place, but of the heart itself. If, as mostly happens, the left ventricle is the one smitten by disease, in spite of its thickened walls and its enlarged chamber, a less volume of blood would be probably driven through the aorta and systemic vessels than in health, and an anæmic condition of the body would be the result. In some instances I have no doubt there is regurgitation through the mitral orifice and pulmonary congestion; but I desire it to be understood that this is an accidental and not a necessary sequence. In two of the three cases of cardiac enlargement I have just alluded to the lungs were pale and bloodless; yet the patients both suffered dyspnœa before their deaths—a condition exaggerated by the presence of a considerable quantity of fluid in the pleural cavities, although we must possibly seek for its origin in the engorgement of the heart and the consequent withdrawal of so much blood from the general circulation. It is this chronic distension of the dilated heart in a normally-sized pericardial sac which is doubtless accountable for the pseudo-friction sound occasionally heard in such cases.

Brighton.

[6] One patient died of hæmorrhage into the pons Varolii and atheroma of the cerebral arteries; another, whose heart weighed 22oz., had sarcoma of the left kidney; the third had contracted granular kidneys, with a heart weighing 20 oz.

[7] Principles and Practice of Medicine, vol. ii., pp. 29, 30.

TREATMENT OF UTERINE FIBRO-MYOMA.[1]

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BEFORE proceeding to the consideration of the surgical treatment of this common disease, I will say a few words about the medical and dietetic treatment, because, seeing as I do a large number of cases in consultation with my medical brethren, and of cases who come to me from them, for an opinion as to whether any active treatment is necessary or advisable, I am much impressed with the fact that a great many of the patients, who might lead comfortable lives if they were wisely guided as to their diet and general method of life, are allowed or advised to follow a course which makes them worse instead of better, and tends to bring them into the hands of the surgeon.

When a patient presents herself with a small or moderate sized tumour I always begin by asking the following questions: 1. Are you getting so much larger that you have to alter your clothes? 2. Do you suffer any inconvenience from your increased size? 3. Do you suffer pain generally or at the monthly periods? 4. Are the monthly periods regular as to time, and are they prolonged or excessive? 5. Is the action of the bowels or that of the kidneys or bladder interfered with; and are there pressure symptoms, such as swelling of the legs and feet? When these questions have been answered, I ask for a sketch of the usual diet and the habit as to stimulants, and then as to the amount of rest taken at the onset of the period and during the flow. Finally, I inquire whether any special medical treatment has been adopted. If the first three questions are answered in the negative, as they are in the great majority of cases, the chances are that, with a little good direction as to medicine, food, and drink, there will be little need to take into consideration any surgical treatment. Now, I find that in the great majority of cases the patient has been told that she must live well, and take plenty of wine, beer, or spirit, to make up for the free periods and support her strength. There cannot be a greater mistake. The disease, in its early stages always, and in its later stages generally, is found in patients who have a tendency to make flesh and blood fast, and if their alvine and urinary evacuations are carefully regulated, and they are advised to take red or butcher's meat sparingly, and live chiefly on fish, white meat, eggs, milk, and vegetables, and practically wear the "blue ribbon," or only take the smallest quantity of wine or weak spirit-and-water, when their digestion is aided by so doing, the disease will stand still, and their tumours give them little or no inconvenience. They should also be encouraged to take regular walking exercise in the intervals between the periods, but to remain if possible at perfect rest when they occur, and more especially during the congestion which precedes the flow. It is also a common practice to give ergot during the menstrual flow, and I believe it is a great error. The growth cannot then be starved by contraction of the uterine muscle, for it is by its physiological nerve stimulation abundantly supplied with blood, and at the most the flow is checked, which is nature's natural outlet for the increased blood-supply, and thus is increased the congestion upon which the growth feeds. The ergot should be given with some nux vomica, which aids its action, and with other vegetable bitters, which prevent it from disagreeing with the stomach, in the intervals between the periods, and a tonic contraction is kept up in the uterine muscular fibres which starves the growth. Then, again, it is a common practice to give these patients iron, because they are often anæmic from loss of blood. I believe this is just as harmful as giving them red meat and wine. Anyone who has watched and studied

[1] Read before the Cambridge Medical Society, June 5th, 1886.

many of these cases will see that iron, red meat, and wine are the things upon which fibro-myomata grow, flourish, and bleed most. It would occupy too much time to inquire thoroughly into the life-history of these growths, but I am convinced that the ovarian nerve stimulus, which finds its natural outlets in regular menstruation, married life, and maternity, are their great enemies; and if we argue back from these, it is easy to see why iron and meat, the blood-givers, and wine, the great stimulator of the circulation, feed and stimulate the nerve forces, which in the majority of these patients have not and cannot have their natural outlet, and so, like all forces which are excited only to waste, run riot in disease. I do not mean to say that all cases can be prevented from growing by such simple measures, but I do unhesitatingly say that all patients will be made more comfortable by strictly adhering to them, and the large majority will find that they can so effectually check the progress of the growths that they will elect rather thus to regulate their lives than face the serious risks of surgery. I frequently see a patient with a tumour growing fast with all sorts of pelvic pains and discomforts, and with hæmorrhage which threatens to become exhausting. I sketch out a line of treatment, especially dwelling upon the importance of avoiding stimulants and the excessive use of red meat, and advise her to see me again in a few months, saying that it will then be time enough to talk about surgery. When the time comes for the second consultation, the patient comes, not to talk about surgery, but to say how much better she is, and to ask for some further and perhaps more stringent and definite rules as to diet, or for some variation in the aperient or tonic.

In passing now to the surgical treatment of those cases which have gone beyond milder measures, when they first seek special advice, or which the milder measures have failed in, I propose to take as my text three cases which I have recently operated upon, because it is quite impossible to deal with the whole subject in one short paper, and these three cases illustrate in a remarkable manner some of the practical difficulties of diagnosis, and some of the most important pathological considerations.

The first case is one of a very rare class, in which sub-peritoneal and pedunculate tumours grow so fast as to cause marked emaciation, and clearly such cases are only amenable to surgical treatment, and that of the most prompt and radical kind. I have selected this and the other two cases about to be related because they equally illustrate the impossibility of always making an accurate diagnosis between uterine and ovarian tumour, and because I hold that when such cases are met with immediate surgical treatment is the only proper course.

CASE 1.—H. F——, single, aged thirty-six, was admitted into the Samaritan Free Hospital, under my care, on March 21st, 1886. She was markedly emaciated, especially about the face and bust, and said that she was losing flesh fast. For the last twelve months she had suffered from frequent attacks of bilious vomiting, with much flatulence and persistent constipation. She had never had any serious illness, and the lungs, heart, and kidneys were healthy. Her father died of phthisis at forty-one, and her only sister at twenty-one. Her mother, aged sixty-eight, was alive. One of her mother's brothers also died of phthisis. With the exception of the attacks of sickness, she had been in her usual health till two months before admission, when she noticed a lump in her abdomen, which fell over from side to side when she turned in bed. It increased rapidly in size after she first noticed it, and another similar lump soon appeared and also grew fast. Menstruation began at eleven and was always very free and accompanied by much pain till six or seven years back, when the pain and quantity both decreased, but the periods continued to be sufficiently copious and quite regular. On examining the abdomen, I found two large solid tumours: one lying rather to the right and in the lower abdomen; the other above it, entirely in the left side, and passing up under the ribs. Between the two, and somewhat to the left of the median line, there was a third small hard body of irregular outline, which I believed to be the uterus, and the use of the sound verified this opinion. The cervix was found by vaginal examination to be small and soft and high up on the left side. The pouch of Douglas was occupied by a hard rounded mass, which was evidently the lower part of the tumour in the right side of the abdomen. Looking to the position of the two tumours, their relations to the uterine body, the menstrual history, and their rapid growth, which was coincident with emaciation, I came to the conclusion that they were solid ovarian tumours. On March 24th I made the usual median incision and found that the two large growths were pedunculated fibro-myomata, that there was a third similar growth between them, and that the body of the uterus was covered with other small growths. Both ovaries were large, but fairly healthy. I at once decided to perform hysterectomy, as I could include the whole mass in the wire of Koeberlé's serré-nœud, leaving no tied stumps in the peritoneum; and when this can be done complete supra-vaginal hysterectomy is an easier and safer operation than the removal of outgrowths with vascular pedicles, which have to be ligatured and returned, together with the stumps of the ovaries and tubes, which it is necessary to remove in a case of the kind in order to stop the growth of the smaller tumours on the uterine body. The mass when removed weighed just under 7 lb. The patient, who was a nervous and excitable woman, had a temperature of 103°, with a pulse of 108, at the morning visit on the day after the operation, but it fell at once when some pounded ice was applied to the head in a piece of mackintosh, and she made an uninterrupted recovery.

In this case I am certain that an absolute diagnosis was impossible until the abdomen was opened; and though I did not exclude from my diagnosis the possibility of the tumours being fibro-myomata, their general characters, positions, and rapid growth made it more probable that they were solid ovarian sarcomata. This leads me into a short digression from the proper subject of my paper for the purpose of discussing a most important practical point. I have long been in doubt whether it is right to operate upon solid ovarian sarcoma, because, if the operation is immediately successful, the patient is nearly certain to die with recurrent sarcomata in the glands and in various parts of the body in from twelve to fifteen months. Of course it is impossible to say whether life would be more prolonged if the original tumour were left alone; but I fancy not, and that, on the whole, the suffering would be greater with this enormous abdominal mass present. It was not this consideration, however, which turned the balance in the case just narrated in favour of operation, but the fact that, among many recurrent cases (which can be consulted in my published ovariotomy tables), I have one signal success in the case of a young married lady, who was almost in a dying state when I operated, and from whom I removed a large brain-like sarcoma of one ovary, separating extensive adhesions which involved the other ovary. She had two girls before the operation, a third within two years, and quite recently, on the sixth anniversary of the operation, she sent me the photograph of a fine baby boy, who is the only male heir to his father's name, and whose advent had long been keenly desired; one such success makes up for many sad failures, and now the instance I have recorded is another encouragement to operate in these cases, for it would have been a terrible thing had I left this poor woman to perish, believing the tumours were ovarian sarcomata, when they were simple fibro-myomata and radically curable.

The second case which I am about to record is another example of the impossibility of certain diagnosis in some cases, and it again carries me beyond my subject; but the lessons it teaches are so bound up with it that I feel that no apology is necessary for relating it.

CASE 2.—E. A. J——, aged forty-five, married, and mother of one child twenty-four years of age, was admitted into the Samaritan Hospital, under my care, on April 3rd, 1886. She was not emaciated, but had a very sallow, unhealthy appearance. She had suffered for some years from sickness, flatulence, constipation, and pain after food. The heart and lungs were healthy, but the kidneys were daily secreting from twenty to thirty ounces of pale, highly albuminous urine, with a specific gravity of 1010, and she had for the last three years been unable to empty the bladder without the aid of manual pressure over the lower abdomen. She had married at the age of nineteen, and had one child; then had been a widow from twenty-one to twenty-nine; subsequently she married again, and had a miscarriage. She was regular after this till two years before admission, when coloured discharge became almost constant, and so continued. The father's family was phthisical; the mother was living, aged seventy-seven; and six of her own brothers and sisters had died, many of them of phthisis. She had had a lump in her abdomen for fourteen years; it was small and hard at first, and to the right of the median line; its growth had been very irregular—fits of rapid increase, followed by complete arrest. When growing fast it caused

much pain, and she had often been laid up for months at a time with the pain. Nine years ago she consulted one of the most distinguished authorities, and was told to wait for the menopause; and in October, 1885, she again consulted him, and the same advice was given. She was keenly anxious for operation, because of the attacks of pain and the increasing renal and bladder trouble. I found the abdomen occupied by a large irregularly-lobed tumour, with the bladder drawn up on its anterior surface; the tumour evidently contained a large quantity of fluid. Vaginal examination revealed a large soft fluctuant swelling pressing down between the bladder and cervix, so as to almost obliterate the latter, and a harder mass behind the os. The sound passed a little over three inches, and apparently into the centre of the mass, for the slightest touch on the abdominal swelling at once moved its handle. Looking to the long history, the evident opinion of the authority mentioned above, and the vaginal relations, I came to the conclusion that it was an old fibro-myoma which had become cystic; and as these tumours usually then grow very rapidly, and are quite as dangerous to life as the ovarian cysts, I had no hesitation in assenting to her wish that it should be removed, though I was fully prepared for a serious operation, and was very anxious as to the behaviour of the evidently damaged kidneys. I operated upon the 7th of April, and, after working hard for three hours and a half, succeeded in removing the greater part of what I have no doubt was a papillomatous cyst of the right ovary embedded in the broad ligament, as they so often are, and united by firm fibrous tissue to all the neighbouring organs, the adhesions having become denser and denser with the repeated attacks of pain (? peritonitis), and the uterus and bladder having been drawn out over the tumour, so that I had to remove the former and peel back the latter. In the course of the operation I tied both uterine arteries (the first time I have ever knowingly ligatured them), and exposed several inches of the right ureter, distended with urine. I was unable entirely to remove the cyst growing between the bladder and cervix, and this brought about a fatal result, for it filled gradually with ovarian fluid and blood; the mixture putrefied, and just when I thought she had got over her dangers, it was suddenly discharged into the peritoneum during the first action of the bowels on the sixth day, and she collapsed and died within an hour.

Here, again, we have a case evidently difficult to distinguish from a fibro-myoma in its early growth, and I am sure quite impossible to distinguish from a fibro-cyst of the uterus at the time it came under my care. I have operated upon many of these cases of ovarian or other cysts embedded in the broad ligament and without a pedicle, and though their enucleation requires care and is tedious, they usually recover well if only they are taken in time—i.e., while their connexions are mere loose cellular tissue; and I have no doubt that this poor woman might have been saved many years of misery, ending in a sudden death, and I the misfortune of an unsuccessful case, if only she had been lucky enough to fall into the hands of someone courageous enough to attack a somewhat doubtful case. The kidneys threatened to cease secreting for the first few days after the operation, and then, as if rejoicing in the unaccustomed freedom from obstruction, poured out an abundance of fairly healthy urine with a much-increased specific gravity; and while I was welcoming this new feature of hope the final catastrophe occurred. It is a combination of hysterectomy with incomplete ovariotomy, and, like a good many operations in the present practice of abdominal surgery, very difficult to classify for statistical purposes. It should be borne in mind that cases like this, though they may not kill the patient by rapid and excessive growth, may be slowly and surely doing so by pressing on and obstructing the ureters, and that the same pathological condition is brought about by many a large solid fibro-myoma, which gives apparently little inconvenience, and certainly neither causes severe pain nor danger from its size or from hæmorrhage—the three symptoms in these cases which have been over and over again insisted on as the only justification for operative interference.

(To be concluded.)

AT an inquest held at Burton on the 15th inst. on the body of James Sproule Smythe, a surgeon, who for some time had been in practice in the town, and whose death occurred on the previous day from prussic acid, the jury returned a verdict of "Death from misadventure."

ON VICARIOUS BLEEDING FROM THE UNDER LIP,

WITH CASES, AND REMARKS ON THE MODERN TREATMENT OF HÆMORRHOIDS.

BY ALEXANDER HARKIN, M.D., F.R.C.S.,
CONSULTING PHYSICIAN TO THE MATER INFIRMORUM HOSPITAL, BELFAST.

CASE 1.—Mrs. M——, aged thirty-eight years, of bilious temperament, sallow complexion, dark hair and eyes, the mother of six children, called on me early in March, 1885. Before her marriage she had suffered from hæmorrhoids, and during her first and subsequent pregnancies from hepatic congestion and occasional hæmorrhage from the bowels, which frequently gave me some anxiety on her account. Among other troubles, in 1880 she was prostrated with profuse hæmorrhage from a cluster of varicose veins connected with the left femoral vein and close to the knee-joint. On this occasion she presented every sign of debility and anæmia: blanched cheeks and lips, sunken features, compressible and feeble pulse, undue palpitation of the heart on the slightest exertion, continuous headache, and frequent vertigo. She attributed her exhaustion to a profuse bleeding from the left under lip, occurring at every meal, and generally continuing for ten minutes each time. On examination I found a slight abrasion at the junction of the epidermis with the lining membrane of the lip, about half the size of a threepenny coin, from which the flood flowed freely. Mrs. M—— had removed from my neighbourhood two years previously, and, as the hæmorrhage from the piles had again become troublesome, acting on the advice of a physician of experience, she entered the Royal Hospital, Belfast, in February, 1883, where soon after the offending growths were deligated by one of the attending surgeons to that institution. After her return home in April, she experienced complete relief for a short time only, irritation about the anus occurring occasionally, and now and then a slight discharge of blood from the nostrils; but in the following June her left lip became painful, and blood began to ooze from it once or twice in the week; the intervals then became gradually shorter, the drain occurring every day, and for many weeks before her visit to me the discharge reappeared at every meal, or when accidentally the lip was hurt. Having from previous lengthened experience acquired a thorough knowledge of the patient's constitution and requirements, I did not hesitate in adopting a plan of treatment. I ordered the immediate application of a blister, 8 in. by 4 in., for eight hours over the region of the liver, to be followed by cotton-wool dressing. On visiting Mrs. M—— next day, I was informed that from the moment free vesication was established all labial hæmorrhage had ceased, and a return of health began to be felt. I then prescribed the use of chlorate of potash and iron in liberal doses; her colour and bodily strength soon reappeared, her headache and vertigo troubled her no more, and, with the exception of an occasional feeling of pain at the seat of discharge in the lower lip, she has not had a recurrence of any of her former ailments. In January last she gave birth to a male child without any unusual trouble, and up to the present date (a period of two years and seven months) there has not been even the slightest sign of the hæmorrhage.

CASE 2.—Mrs. McD——, aged thirty-six years, mother of six children, sent for me on March 8th, 1886. I found her confined to bed, pallid and exhausted from a profuse discharge of blood from the rectum, which had continued for several days, having delayed from motives of delicacy to send for medical advice; the blood accompanied every evacuation, and frequently after feeling a desire the motion consisted of blood alone, often to the amount of three or four ounces. On examination I found a fringe of external piles surrounding the aperture of the rectum, and inside the sphincter a number of knotty tubercles, from one of which red arterial blood flowed freely. In this, as in the former case, I immediately applied a blister over the region of the liver, and ordered as an adjuvant a mixture of tincture of perchloride of iron and chlorate of potash solution. The relief was immediate, and the patient very soon recovered her natural colour and strength, and was able to take out-door exercise. At the end of a fortnight, however, I was again called to the

case, and found that the bleeding had returned as freely as ever, with great mental and bodily depression. The relapse was due to the patient having unwisely stood behind a counter to assist her husband for ten hours on a previous day. As her friends had now become anxious on her behalf, I requested Dr. Walton Browne to see the patient with me. After recognising the nature of the ailment, we agreed to continue the hæmostatic medicine, and gave her a sedative enema at intervals. These remedies only gave her partial relief, and as the drain was still continuous and severe, at the request of the patient I reapplied the blister to the same place on March 28th. The remedy was again successful; all bleeding ceased, and has not made any reappearance up to the present date.

As bearing upon the etiology of these discharges, I wish to append the history of three recent cases in growing youths, very similar in character and cure.

On May 13th, 1885, I was asked to visit J. B——, a counter hand in a spirit store. He had been subject to free bleeding from the right nostril at short intervals for many weeks; he also suffered from severe headaches and constipated bowels; no history of piles. On examining the region of the liver, I found the organ tender on pressure and somewhat enlarged. I then applied the liquor epispasticus freely over the hepatic region, telling the young man that after five hours the hæmorrhage would permanently cease. I ordered some cholagogue medicine, at the same time giving him general directions as to diet. As I predicted, the hæmorrhage ceased, and now after the interval of more than a year it has not returned.

On the same day (May 13th), a young man, apprenticed to a chemist, was brought to me by his father, who stated that his son had suffered very much from indigestion and vertigo, and that he had been bleeding from the right nostril for many days. I had formerly treated his father for congestion of the liver due to excessive drinking. On looking at the abdominal region, I found an enlarged liver, with congested cutaneous veins traversing the abdominal surface over that organ. I applied the fluid blister, with the usual result—an immediate cessation of the epistaxis. The young man has since emigrated, but until the day of his departure, six months after, the cure had been complete.

On May 25th, 1885, J. S——, an in-door servant, suffering from profuse epistaxis from the left nostril, sought my advice. The bleeding had continued for six weeks, at intervals; it had first appeared at 6 A.M. and 9 A.M. daily, but latterly it observed no limits, coming on six or seven times in the twenty-four hours. On examination, I found a large and torpid liver; the patient had, besides, many of the subjective signs of the disease—disturbed sleep, headache, irritable temper, borborygmi, hardened fæces, high-coloured urine, depressed spirits, inability to rise in the morning, and drowsiness during the day. I applied the counter-irritant over the site of the disease, and with the result that the epistaxis yielded at once as well as the other objective and subjective symptoms of hepatic disorder. After an interval of more than a year he has continued well.

It is freely acknowledged by all writers on the pathology of hæmorrhoids that these adventitious bodies owe their existence chiefly to the congestion of a distant organ—the liver,—or to obstruction, from various causes, of the great portal vein, through which the venous blood from the abdominal viscera passes into the liver. Van Buren[1] has called attention to the fact "that these veins, including the hæmorrhoidal, are unprovided with valves, and that consequently, whenever the abdominal circulation is sluggish or obstructed, as by an overloaded colon, abdominal tumour, or congested liver, there is a strong tendency to stagnation in its lowermost tributary—the hæmorrhoidal vein. When a mass of dilated veins is thus frequently subjected to bruising in the act of defecation, it is liable to an attack of inflammation, the connecting tissues surrounding the veins becomes infiltrated with exudation, and the morbid anatomy of the hæmorrhoidal tumour is thus explained." With such a history of the genesis of piles, does it not appear strange that to a great extent the remedy is sought for, not in the removal or mitigation of their primary cause, but in their mechanical obliteration by ligature, by the actual cautery, or by the clamp? Yet such, unhappily, is too often the case; and what but serious injury must be the result, when this line of treatment is adopted in men with enlarged and indurated livers, with persistent engorgement of the portal system, and the circulation through the abdominal viscera almost completely obstructed? The fault, if such there be, is chargeable to the medical adviser, who, instead of proceeding upon physiological grounds and labouring to cure the disease by removing its cause, too often turns over his patients to the operating surgeon, and considers his responsibility at an end, when these erectile tumours, whether internal or external to the sphincter, are deligated in a scientific manner.

My first case clearly exemplifies the failure of merely surgical appliances in the absence of constitutional treatment, and the mistake of regarding a prominent symptom as the primary factor in the cycle of morbid phenomena. The violent suppression of a salutary discharge was soon followed by its re-establishment at the superior outlet of the digestive tract; and had similar methods been applied to its extinction on the labial outlet, we should doubtless have found that the nasal organ would in due course have protested, acccording to its wont, by profuse epistaxis, against the mere mechanical treatment of a systemic lesion. Would the doctrine of deligation be permissible in the latter case? The second example illustrates the advantage of counter-irritant and derivative treatment in immediately controlling and finally suppressing the hæmorrhoidal flux, and in this manner superseding the necessity for operative procedure, with its attendant dangers and discomforts.

The frequent occurrence of epistaxis in youth is evidently due to the excitement and hyperæmic condition of the liver and digestive organs during the period of active growth and the constant demands on its functional activity. The liver at this stage closely approximates to the condition in after-life, which is the causal factor in the development of piles, and as such is equally amenable to treatment in accordance with etiological principles; the derivative that cures the hæmorrhoidal flux as certainly puts an end to the epistaxis, the outcome of hepatic congestion. The cases related are but the types of many others in a lengthened experience. I have chosen them as being of recent occurrence, and as sufficiently removed from the date of treatment to test the validity and permanence of their cure.

My object in this paper is to enter my protest against the unsound principles upon which hæmorrhoids are so frequently treated, and the routine procedure adopted in the sudden suppression of a habitual discharge without sufficient attention to its remote cause.

Belfast.

[1] Diseases of the Rectum, p. 18.

AORTIC ANEURYSMAL DILATATION, RUPTURE, CAUSE, AND NECROPSY.

BY W. A. HOLMES, M.D., &c.

THE following is an account of a young man cut off in the prime of life through a defect, but aided by a sudden effort in spurts whilst rowing. His age was twenty-three years; he was apparently strong, healthy, and well built. He assisted his father in business, was not called upon to do sudden or heavy work, and was fond of rowing.

The following description of how the calamity occurred is culled chiefly from the coxwain's narrative of events:—In the evening, while practising for a rowing competition in a crew of four oarsmen and coxswain, they rowed for about half a mile at an ordinary pace, the deceased being No. 3 in the boat. They then had a sharp spin for 300 yards down the stream; shortly after this another for 200 yards; they then stopped, but for no alleged reason, for a few minutes, and then rowed leisurely. Again they put on another short spurt, and finally gently rowed to the boat-house. All this occupied about half an hour. During this period the unfortunate young fellow never showed any signs of fatigue or embarrassment, but when stepping from the boat he exhibited signs of fatigue, made apparent by his not helping to take the boat in as usual. He walked with the others into the dressing-room, but did not return at the time they did. This caused the coxswain to look for him, and he found him partaking of some brandy he had sent for. At the same time he complained of a bad attack of indigestion. The coxswain remarked to him, after he had finished dressing and come out of the room, "You don't look at all yourself," as he looked very heated and red in the face; the reverse was the case generally after exertion, when he looked white. He now got into a boat and was rowed home by the coxswain.

At the foot of the garden he got out of the boat and carried his bag into the house, changed his coat, returned to the boat, and sat in it while his friend took him for a row. When they had gone about a quarter of a mile, he remarked, "I feel just as if I had broken a bloodvessel inside," at the same time putting his hands by his side; then, almost instantly, without warning or without saying a word, he threw up his arms and fell to one side, partly leaning over the side of the boat. His friend replaced him in the boat, loosened the attire about the neck, and rowed him home. Apparently he had died at this time. Prior to the boating spree he had complained of indigestion, and he had not for some months partaken of any supper after a walk in consequence of the uncomfortable feeling he experienced during the attack of the said indigestion.

Necropsy.—Body well nourished and muscular. Arms from elbow to tips of fingers black, and lower extremities from knees to tips of toes of a similar colour. Post-mortem lividity in depending parts very marked. A frothy, black-looking, offensive fluid oozing from nostrils and mouth. No external marks of injury. Pupils equal, and widely dilated. After removing the sternum and cartilages of of the ribs, the pericardial sac was found much distended, and the prolongation of the parietal layer on to the aorta was visible, apparently pushing the superior vena cava to the right side. The pericardial bag and that part on the aorta was filled with a black congealed clot of blood and a small quantity of black fluid blood. The heart was entirely encircled with a clot about half an inch in thickness, the right auricle being much distended. The aorta was very much dilated; the measurement in circumference a little way about the base was 5½ in., at the junction of the ascending and transverse parts 6¼ in., and at the middle of the transverse part 3¾ in. The aneurysmal dilatation was more marked posteriorly and on the right lateral surface of the ascending part; on the anterior surface in the same part, a little remote from the bend and passing up to the junction of the transverse part, was a curvilinear tear, ⅜ in. in extent, with a zigzag margin ⅜ in. from the base of the aorta. Another tear in the outer muscular coat was situate a little higher, but more to the right, it being an incomplete tear. The right auricle and pulmonary artery were filled with black fluid blood. The other chambers of the heart and aorta throughout were empty. Left ventricle very muscular. The stomach was much dilated, containing half a pint of green half-digested food, with much mucus (the colour due to spinach). Lungs, liver, spleen, and kidneys were black on section; very black fluid blood oozed out.

Remarks.—From the time the deceased gave up the rowing until the time he threw up his arms would be about three-quarters of an hour. The point of interest in this case is, When did the rupture occur? Did it occur during one of the spurts, or subsequent to one of them, permitting of rowing in another spurt, and finally to leisurely row in? He appeared to be fatigued when he first got out of the boat, felt what he called a bad attack of indigestion, was very red in the face, which was unusual for him, all of which tend to show that the rupture had occurred. But why such a large rupture in the aorta as ⅜ in. did not cause sudden death is a marvel. The brandy, through its stimulating effects on the endocardium, would cause more blood to be thrown forcibly into the aorta, and consequently more into the pericardial sac. Now, if this young man had not taken the brandy, but lain down and kept himself quiet, there might have been a possibility of his recovery, as I have seen a specimen where the aorta ruptured and the patient recovered and lived for months after, but died from a subsequent rupture; and other cases are on record. Another question is, Was death due to the coagulation of blood on the heart or to the impediment of the heart's action?

Barrow-in-Furness.

RED CROSS SOCIETY.—The National Society for Aid to the Sick and Wounded in War (British Red Cross Society) has received decorations of the Red Cross from H. H. the Prince Alexander, as President of the Bulgarian Red Cross Society, in favour of the Society's agents, Doctors Charles Fetherstonhaugh and Richard Lake, and Sister Henrietta Stewart (sent out by command of the Queen), in the late Servo-Bulgarian War, in recognition of their services to the sick and wounded in Bulgaria. A notification has also been received from the Foreign Office by each recipient that Her Majesty has been graciously pleased to grant them permission to accept and wear the decoration.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

DIPHTHERIA: ITS TREATMENT.

BY JAMES MERCES, M.R.C.S., L.R.C.P. Lond.

AT a time when so much is being written about outbreaks of diphtheria in the south, with its undue severity, it will be interesting to know the health in other parts of the metropolis. During the past twelve months it has been my share to treat no less than thirteen cases of diphtheria, with one death. No originality is claimed in the plan adopted by me, though it may somewhat startle a few at the large and frequent doses of certain drugs ordered. Briefly, my cases were treated, with the exception of very young children, by (1) internal treatment, (2) by emetics, (3) by gargles, and (4) hygienically.

1. Where the depression is marked, though there may only be the slightest indication of a certain questionable grey slough, with a moderate amount of elevation of temperature and glandular enlargement, a mixture (preceded by a gentle aperient) of the following should be ordered: solution of perchloride of iron, six drachms; dilute nitric acid, two drachms; glycerine, one ounce; water to six ounces; an ounce to be taken every two hours. After the lapse of a few hours patches may be noticed extending in certain directions, while the original patch or patches will appear somewhat shrivelled, the temperature and glandular enlargements probably increasing.

2. An emetic may now be used. Apomorphia acts in these cases most satisfactorily, from three to five minims promptly producing emesis in from one to three minutes. If now the ejected contents be examined portions of slough may be detected. The patient, though rather prostrate, will be much relieved of urgent dyspnœa. It is rarely necessary to repeat the apomorphia. The iron mixture is to be continued every second hour.

3. If the patient be intelligent and able to use a gargle, the following will be found most beneficial, establishing a healthy condition to the surface from those portions of the fauces and tonsils where the patches have been recently bared of membrane in the efforts of sickness produced by the apomorphia. The gargle should be made in this fashion:—In a six-ounce bottle place a drachm of chlorate of potash, add to it half a drachm of pure hydrochloric acid, and while the nascent chlorine gas is being generated fill the bottle with water, and direct that an ounce of the gargle should be used (the head being well thrown back) every third hour.

4. The patient's strength should be maintained by small and frequent quantities of milk and clear beef-tea unflavoured with pepper, salt, &c. Alcohol is urgently demanded, and may be given with a free hand and with much benefit should prostration be marked. It is absolutely imperative that the temperature should be uniform—say, 70° F., with a current of fresh air.

Drayton-park, N.

TWIN LABOUR COMPLICATED WITH RUPTURE OF LARGE VARICOSED LABIAL VEINS.

BY AMBROSE ATKINSON, M.R.C.S.

SOME little time ago I attended Mrs. F——, aged thirty-nine, in her eighth confinement. Labour commenced about 8 P.M., though she had been poorly for over twenty-four hours. On examination a breech presentation was made out. After waiting some little time it came well down into the pelvis, and when near the outlet the right labium began to swell. The delivery was easy, but whilst separation was being effected the patient was seized with another very strong pain. On examination, made with difficulty, a second group of membranes could be felt, which I ruptured, and the patient obtained ease. This procedure, however, did not affect the tumour, which steadily increased to an alarming size. Another pain coming on, the tumour suddenly burst on its inner side, deluging the bed &c. Not caring to take the whole responsibility of the case, I sent for Mr. Holmes

of Burmantofts, requesting him to bring the forceps, with the hope of seizing the presenting head. In the meantime, as hæmorrhage was freely going on, I made a firm pad of a napkin and held it to the parts, so as to effectually stop the bleeding. On Mr. Holmes's arrival he slipped the short forceps on to the second head, when the child was suddenly expelled, the injured part being at the same time firmly compressed. The placentæ were then easily disposed of. On examining the damage, it was found that the inner side of the labium was so torn that four fingers could be passed into the opening, which led to a cavity sufficiently large to hold the whole hand. The bleeding had now abated, so the cavity was filled with strips of lint well dusted with iodoform. Pressure being applied by means of a firm spica, the patient was left for the night. On the following morning opium was administered and the plugs were removed, very little bleeding occurring. The vagina was syringed out with perchloride lotion (1 in 3000), and an iodoform suppository placed well up into it; the wound was then dusted with iodoform. This was done twice a day for a week, the patient making a very good recovery. A piece of vein about three-quarters of an inch long, which lay across the wound, sloughed off about the fifth day, a little bleeding taking place. On questioning the patient about the vein, she told me, after all was over, that she had had a lump there for some time, which got larger towards night, but she did not think it worth noticing. The question is, supposing I had known about it before delivery, could anything have been done to save rupture?

Burmantofts.

AN INDIARUBBER CATHETER IN THE MALE BLADDER: SUCCESSFUL REMOVAL.

By HENRY O'NEILL, M.D., M.Ch.,
SURGEON TO THE BELFAST ROYAL HOSPITAL.

WM. M——, aged sixty-three years, farmer, near Belfast, suffered for the past three years from retention of urine due to enlargement of the prostate gland, which required him to use an indiarubber catheter. Whilst passing the catheter on the evening of June 6th, 1886, it accidentally slipped into the bladder. Being called in consultation with Drs. Clugston and McNinch, I found the patient had been suffering from complete retention of urine for thirteen hours and a half. Having placed the patient on his back and administered methylene from Junker's apparatus, I introduced into the bladder a small Thompson's lithotrite, and after searching carefully for some time, I succeeded in extracting the catheter, which was about nine inches long and in size about a No. 12. After its extraction, on drawing off the urine a small amount of blood was mixed with it. The bladder was carefully washed out with warm water, using Clover's suction-syringe. The patient was given one-tenth of a grain of morphia, and the next day a gentle saline aperient was administered. He had the urine drawn off regularly and the bladder washed out with solution of sulphocarbolate of soda (half a grain to the ounce) twice a day. A poultice of linseed-meal was applied over the hypogastrium and kept on for two days. Three days after the operation he was reported as improving, with no bad symptom, and at the end of nine days was going about his usual duties.

Belfast.

NOTE ON COCAINE.

By GEORGE ELDER, M.D., C.M. Glas.

COCAINE is now so extensively used in minor surgery, and usually with such happy results, that an experience like one I had the other day will come upon most of us as a disagreeable surprise.

Preliminary to opening a superficial abscess, twelve minims of a freshly prepared 10 per cent. solution were injected under the skin; and three or four minutes afterwards syncope supervened, followed by twitchings of the face, falling of the jaw, coldness of the body, clammy perspiration, lividity of the face—in fact, all the appearances of imminent death. The patient was several minutes in recovering consciousness, and during the remainder of the day felt very prostrate. Several similar occurrences have been noted in ocular surgery from time to time, showing that cocaine is not so innocuous as has been generally supposed.

Nottingham.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. GEORGE'S HOSPITAL.

SUICIDAL PENETRATING WOUND OF THE NECK; RECOVERY; REMARKS.

(Under the care of Mr. PICK.)

WOUNDS of the front of the neck are the commonest of those met with in this region, and attended with so many dangers that it would take too much space to even enumerate them. In the following case the treatment adopted was most successful, the application of a stout silk ligature on each side being sufficient to keep in apposition the parts divided until firm union had taken place; this was no doubt much aided by the operation of laryngotomy. All danger of suffocation from the extension of local complications was thus prevented, and the patient enabled to breathe pure air. The introduction of a catheter into the œsophagus saved much difficulty in feeding the patient, more nutriment being introduced in this way than could otherwise have been given without great pain and considerable disturbance of the parts. In the majority of wounds of the anterior part of the neck it is not advisable to introduce sutures so as to close the wound; but in a case such as the one which we record, where a certain amount of antiseptic treatment can be applied and the smallest amount of disturbance of the parts is permitted, the introduction of sutures hastens the healing, and is certainly to be advised. For the following notes we are indebted to Mr. W. Ball, surgical registrar.

J. T——, aged forty, a night porter, had been a heavy drinker of beer for many years. There was gout on the father's side of the family, but no history of insanity. Latterly he had been much depressed, owing to having lost the securities for some money lent to a friend. He was found in a watercloset with his throat cut, lying in a pool of blood.

On admission, there was a wound four inches long, which commenced on the left side of the neck over the carotid sheath, and, passing across to the right side through the thyro-hyoid membrane, terminated close to the right carotid vessels. The incision passed through the epiglottis, the larger part of which was left attached to the base of the tongue, and, having completely divided the middle constrictor of the pharynx, had laid bare at one spot the vertebral column, so that the upper part of the pharynx was severed from the lower, and the larynx and trachea had receded towards the chest for fully an inch and a half. There was no hæmorrhage except some slight venous oozing. The house-surgeon, Mr. Page, brought together the divided edges of the middle constrictor with fine catgut sutures, having first passed a gum catheter through the mouth into the œsophagus. On temporary closure of the skin wound, intense dyspnœa came on, so as to endanger the man's life. A stout silk ligature was now passed on each side through the upper border of the thyroid cartilage below and the tissues surrounding the hyoid bone above, and then by gradually drawing them tight the larynx was raised to its proper position. The ends of the ligatures were left long, and were brought out at the corners of the skin wound. Laryngotomy was performed, and a silver tube introduced. The skin wound was united with silver sutures and dressed with carbolised gauze. The patient was placed in a tent, the air of which was kept moist by a eucalyptus steam spray. The man was fed every four hours through the catheter. He passed a quiet night, but was a little restless next day. Owing to his attempting to bite through the catheter, it was thought advisable to remove it, and introduce one through the nose; this was more comfortable, and for twelve days he was fed entirely

through the nose. On the twelfth day the stout silk ligatures came away, and sufficient union had taken place to retain the larynx in its normal position. The power of deglutition returned, and the nasal tube was removed. Afterwards there was no trouble in swallowing. In a few more days the tracheotomy tube was removed, the original wound having nearly healed, the tent and spray were dispensed with, and the man was allowed to get up. For several days rapid improvement followed, but on the tenth day after the removal of the tracheotomy tube there was difficulty in breathing, which culminated in an attack of spasmodic dyspnœa. Fortunately this was not fatal, but it was deemed necessary to reintroduce the tube through the crico-thyroid space. After wearing this for a week he was able to leave it off for several hours at a time, being trained to this by closure of the tube with a cork, respiration taking place through an aperture in the upper convex surface of the tube. On June 26th he was made an out-patient, wearing a silver tube, and came up daily to be watched while it was removed. At the end of August he left the hospital, being able to breathe freely in the normal way. The only change noticeable was a slight huskiness in the voice.

Remarks by Mr. PICK.—It is seldom that the tissues of the neck are divided, with sufficient freedom to allow the weight of the lungs to cause retraction of the lower end of the air-tube towards the thorax. Dr. Gairdner (*Edin. Med. and Surg. Journ.*, vol. xvi. p. 353) has recorded a case in which, after division of the larynx and œsophagus through the crico-thyroid space, the cut extremities retracted from each other to the distance of at least three inches. Attempts to procure union of the divided larynx failed. The man recovered, and for the remainder of his life had a large fistulous opening through which he breathed, and took food by passing a tube into the lower end of the œsophagus. In subcutaneous rupture of the trachea a similar recession is met with. In the present case it will be seen that the larynx dropped an inch and a half towards the chest. The case is also of interest in the success which attended the attempt to procure union of the thyroid cartilage to the tissues around the hyoid bone, and the ultimate perfect recovery of the power of deglutition and normal respiration.

TOTTENHAM HOSPITAL.

STONE IN THE BLADDER; SUPRA-PUBIC LITHOTOMY; RECOVERY.

(Under the care of Dr. LICHTENBERG.)

FOR the following notes we are indebted to Mr. Lloyd G. Smith, M.B., house-surgeon.

Thomas A——, aged fifteen years, errand-boy, was admitted on October 29th, 1885, complaining of loss of flesh, frequent and painful micturition, with the passage of gravel and occasionally blood, nycturia, and prolapsus ani. He has always had some amount of pain on micturition as long as he can remember, with pain at the end of the penis, which was relieved by pressure at that part. Three months previously he passed blood in the urine for the first time; and severe straining, with increase of pain on micturition, supervened. He had been treated at a dispensary for "debility," and he thinks the medicine prescribed relieved the pain for a time. Since then he has been in a union infirmary, where he was told he had a stone, but no treatment or examination of the bladder was attempted. The family history is good, and there is no history of any other illness. His surroundings at home have been uncomfortable, as, owing to the large family, the supply of food has frequently been insufficient—so much so that he at one time left home and attempted out-door work on a farm, and then went on the tramp, when he became so ill as to necessitate his removal to the union infirmary, as above mentioned, whence he returned home.

On admission he was in an emaciated condition; micturition was frequent and painful, and only accomplished in the erect attitude; the urine contained glairy strings of mucus and gravel, was alkaline, and passed involuntarily during sleep. On passing a sound, it at once struck a stone, and per rectum a calculus, apparently about an inch and a half long, was felt. The anus was prolapsed, but easily reducible.

On Nov. 5th chloroform was administered, and an incision three inches long made above the pubes in the middle line. After the bladder had been moderately distended with warm boric lotion, retained by means of an elastic ligature around the penis, the tissues were dissected aside down to the peritoneum, which was pushed up and held by the finger, and the bladder found lying somewhat deeply. An incision was made through its walls, and the stone seized, but found to be friable, and could not be removed until the incision in the bladder had been enlarged and the calculus pushed up by an assistant's finger in the rectum; it was then easily removed by means of dressing-forceps; some fragments and débris were also removed. The bladder wound was left open, and a T tube placed in the bladder, with a long end to pass into a vessel at the side of the patient. The abdominal wound was sutured with carbolised silk and a drainage-tube in its lower edge. The patient was laid on his side in bed with the end of the T tube projecting into a vessel, and his thighs &c. were well smeared with "pasta urinæ" to prevent excoriation from urine. The diet ordered was milk and beef-tea; the patient's position to be changed at intervals. The calculus removed was the shape of a kidney potato, consisted of uric acid in layers covered externally by a coating of mucus, and weighed seven drachms.

Nov. 6th.—The bladder was irrigated with warm boric lotion. He had slept after the administration of a quarter of a grain of morphia, in the form of a suppository. Urine passed freely, but not so much by the T tube as by the drainage-tube in the lower part of the wound. Glairy mucus passed with it.

8th.—The lower sutures in the abdominal wound were removed, and it was found united. The bladder was irrigated every day with warm boric lotion. Solids were added to the diet.

12th.—The T tube was removed from the bladder, when there was slight swelling and some tenderness around the wound. The temperature had since admission kept fluctuating, at times rising as high as 101° in the evening.

15th.—The remainder of the sutures in the abdominal wound were removed, and the diet was further increased.

19th.—The temperature rose to 103°, and in the evening he had a rigor. The tenderness and swelling around the wound had increased. A boric compress was applied to the wound, and frequently changed. The swelling gradually subsided after extending into the scrotum, and by the 21st the temperature had become normal, which continued until convalescence. Constipation occurred at times, which was treated by mild aperients and enemata. Since the operation the prolapsus ani had steadily diminished. Salicylate of soda in doses of ten grains was administered thrice daily to correct alkalinity of urine, and with some success.

On Dec. 3rd urine was passed per urethram, but continued to escape by the abdominal wound as well until the 12th, when the wound was healed throughout; the urine was then faintly acid. Subsequently a small sinus formed and became a fistula, through which drops of urine and mucus were discharged. This did not close until January, when he was discharged greatly improved in health, having gained in flesh to a surprising extent.

TORBAY HOSPITAL, TORQUAY.

TWO CASES OF LUPUS TREATED SUCCESSFULLY WITH IODOFORM; REMARKS.

FOR the following notes we are indebted to Mr. Guy Tyrrell, house-surgeon.

CASE 1.—Alfred R——, aged sixteen, was admitted to the hospital on Feb. 4th, 1884, suffering from lupus of the nose and lip. The disease had existed for eighteen months, and had already destroyed the lower half of the alæ of the nose and almost the whole of the upper lip. The patient was ordered cod-liver oil, and the sore was dressed with an ointment consisting of one drachm of iodoform to one ounce of vaseline, plugs of lint covered with the ointment being inserted into each nostril. The sore immediately began to assume a healthy appearance and healed slowly but uninterruptedly, and the patient was discharged cured on July 29th.

CASE 2.—William V——, aged sixteen, was admitted on March 13th, 1886. The disease had existed for two years, and extended over nearly the same area, but the lip was not so deeply involved. The same treatment was adopted, and with an equally good result. The patient was discharged cured on August 3rd.

Remarks by Mr. TYRRELL.—I am induced to publish these cases as I do not know that this remedy has been tried before, not having seen it mentioned in any books; but the

results in these two cases were certainly most striking, and I think it worthy of a further trial, as it is certainly a less painful method than scraping or cauterisation.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Extra-uterine Gestation.—Three Hundred complete Cases of Ovariotomy.

THE first ordinary meeting of the session of this Society was held on Tuesday last, Mr. G. D. Pollock, F.R.C.S., President, in the chair. A very valuable statistical paper by Mr. Knowsley Thornton occupied the greater part of the evening.

Dr. HENRY GERVIS read a case of Extra-uterine Gestation. It was that of a woman aged thirty-five, who was admitted into St. Thomas's Hospital on Nov. 19th, 1885. The patient ceased to menstruate on May 9th, and her pregnancy proceeded without incident until July, when she experienced severe pain in the abdomen, which continued until admission. In September she passed per vaginam a pint of "thick greenish fluid"; similar discharges continued at intervals until she came under observation. There had been no uterine hæmorrhage, but a piece of "skin" was said to have come away with the discharge on one occasion. On admission an ill-defined swelling was noticed in the hypogastric region, extending towards the right of the middle line; the lower segment of the uterus appeared expanded and fixed. A large quantity of offensive discharge, yellow in colour, was issuing from the vagina through the os uteri; this discharge was found to consist of broken-down muscular fibre and vegetable tissue. On December 14th she passed per vaginam the shaft of a fœtal tibia. On exploration the decomposing body of a small fœtus was found lying, as it were, transversely in the uterine cavity. It was tightly fixed in its position, and all attempts to extract it were in vain; slight hæmorrhage occurred during the operation, and the patient died on the following day. The details of the post-mortem were narrated. The great omentum and the intestines were adherent to the brim of the pelvis, and under this mass the remains of a partially disintegrated fœtus were found in the posterior half of the pelvis. Almost the whole of the posterior wall of the uterus had sloughed away. The author concluded with remarks on the case, and pointed out that he was unable to find any similar case of extra-uterine gestation occupying Douglas's pouch, communicating both with the uterine cavity and the small intestine.—Dr. C. H. F. ROUTH thought the diagnosis might have been made out more accurately earlier in the case. In cases of extra-uterine pregnancy the menstruation ceased from the very first, and returned after a few months, when pieces of decidua usually came away. A growing tumour not in the uterus coming on under such circumstances could only have been due to an extra-uterine pregnancy.—Dr. GERVIS said that the tumour was not a growing one when the case came into St. Thomas's Hospital. It was, as Dr. Routh suggested, a matter of opinion what means were employed for dilatation of the cervix uteri, but in this unique case the necropsy showed that the method of dilatation would not have affected the result.

Mr. KNOWSLEY THORNTON read a paper on Three Hundred additional Cases of complete Ovariotomy and Twenty Cases of Exploratory Operation. After a brief reference to 188 ovariotomies and 22 other cases of abdominal section previously brought before the Society, the author referred to certain alterations in the arrangement of the tables in the present series. A brief description was given of the treatment adopted in ordinary cases, and of the method of drainage in cases requiring it. Cases of hysterectomy, oöphorectomy, nephrectomy, splenectomy, hepatotomy, &c., were not included, as being better dealt with in separate papers. All the operations had been performed with full antiseptic precautions, but this question was not specially discussed. Septicæmia had not been quite banished, but much had been done in this direction, as shown by one consecutive series of 100 ovariotomies performed at the Samaritan Hospital without a death from septicæmia. A progressive decrease in mortality was shown, and a comparison given of the results obtained in this series with those published by some other leading operators. Adhesions, place of operation, age and condition of patient, removal of one or both ovaries, and weight of tumour as influencing mortality were discussed. The temperature and pulse columns were carefully examined and important facts noted, reference being made to Wunderlich's standard temperatures. The benefit of cold applications to the head and in the form of partial or complete wet packs was demonstrated. The influence of the onset of metrostaxis and of the appearance of "sweat rash" were referred to. Drainage was discussed. The speedy recurrence in cases in which solid sarcomata had been removed was pointed out, and also the serious after-mortality from malignant disease of peritoneum, &c. Avoidance of tapping and performance of early ovariotomy were strongly advocated in this latter connexion. The effects of the removal of both ovaries on menstruation were clearly demonstrated in the tables. Brief details of each fatal case were given. Full tables of all the cases, especially full in the exploratory series, and an analysis of the temperature columns, completed the paper.—Sir SPENCER WELLS said there were many remarkably interesting features in the paper. He observed that of the 320 cases there were only nine in which the Fallopian tubes were diseased. It was supposed that disease of these tubes was of extreme frequency. In his experience it was of rare occurrence. The fact that the mortality decreased as time went on should be borne in mind. In his own practice the mortality went down steadily from 30 in the early part of his practice to 10 per cent. in later years. Antiseptics had proved of great service. He had not used a drainage-tube primarily in ovariotomy since 1878. The tapping of simple cysts was, in his opinion, a safe procedure. They were not malignant. He had observed that tetanus tended to occur epidemically. It seemed at times as though "waves" of tetanus passed over the country in some particular direction. He congratulated Mr. Thornton on his magnificent success.—Mr. ALBAN DORAN referred to the tapping of broad-ligament cysts. His pathological experience supported Mr. Thornton's clinical contention, that tapping even apparently simple cysts was not a safe procedure. Perhaps one case in nine of apparent simple cysts was of papillomatous and malignant nature. Dr. Coblenz showed in Virchow's *Archiv* of 1880 that these papillomatous cysts were very frequent. Exploratory incision was less dangerous than tapping.—Dr. HEYWOOD SMITH spoke of the value of the drainage-tube in certain cases where oozing of a grumous fluid occurs.—DR. W. S. PLAYFAIR said that the "spray" was not a necessary adjunct to antiseptic ovariotomy. He considered until the antiseptic system came into use that it was not safe to operate on cases of ovariotomy in general hospitals. In his belief the "spray" involved the complete and minute carrying out of antiseptic precautions. Hence its value. The free washing out of the peritoneum with water was a valuable procedure, and less irritating than the employment of sponges.—Dr. GERVIS said that the plan of washing out the peritoneum with water originated with the Americans, who even anticipated the Germans.—Dr. K. THORNTON, in reply, said that the employment of the ice cap and cold sponging for keeping the temperature within bounds was of great value, but antiseptics had greatly diminished their need. Drainage-tubes saved lives, and prevented discomfort and fever. But the tube should not be left in too long, lest it irritate the peritoneum, with the result that a chronic effusion is brought on that may cause flooding of the dressings. He was a great unbeliever in the value of tapping simple cysts. He doubted whether there was a large number of cures by this method. And the post-mortem records did not yield any evidence of the existence of cysts that had been so cured. He had never found the reopening of a wound with the insertion of a drainage-tube to be successful. He objected to the use of fanciful terms, as "grumous fluid," which could hardly mean anything more than a mixture of blood and serum. He was not a bigot in the matter of the spray, but it was a useful element; it kept everything about the wound constantly moist with an antiseptic material. He was prepared to admit that washing the wound out with water was very valuable. In cases of pyo-salpinx, where little particles of matter were lodged in various crevices and corners, the hot water broke up the particles into atoms that were easily absorbed or dispersed.

CLINICAL SOCIETY OF LONDON.

Removal of Scapula for Osteo-sarcoma.—Ligature of Large Arteries.

AN ordinary meeting of this Society was held on the 22nd inst., Mr. Sidney Jones, F.R.C.S., Vice-president, in the chair.

Mr. CHARTERS SYMONDS read a paper on a case of Removal of Entire Scapula for Osteo-sarcoma, in a man aged thirty-four, who remained well, and was shown at the Society, two years having elapsed since the operation. Six months before admission he fell and bruised his shoulder, attending for a month at the Croydon Hospital, where he was told he had ruptured a muscle. One month after the accident a swelling appeared, and from that time steadily advanced without pain. The inconvenience was due entirely to its size, the man being unable to do heavy work. When admitted he was healthy in other respects. To the dorsum of the scapula was attached a tumour measuring from nine to ten inches, and projecting five inches from the surface. It moved with the scapula, and did not appear quite to reach the glenoid cavity. The spine of the scapula could just be traced. On April 1st, 1884, the whole bone was removed except the acromion and coracoid processes. The usual transverse and vertical incisions were made, one flap only being reflected at a time. First the minor flap was dissected off, and the posterior border of the bone freed. Next the inferior angle was isolated, and then the anterior flap was reflected and the axillary border freed, the various muscles being divided. The deltoid and trapezius muscles were divided close to the spine of the scapula, and the superior border was freed. The growth was found to extend to the glenoid cavity, so after sawing off the acromion and coracoid processes, the capsule and the muscles covering it were severed. The whole mass was then raised from the chest, and the serratus magnus divided. The subclavian was compressed during the operation, and all the large vessels seized by two pairs of forceps before being divided. In this way little blood was lost. The same evening the man had an unexplained attack of dyspnœa which lasted twenty-four hours, and interfered with sleep. The temperature rose quickly, reaching its highest point—103·6°—on the fourth day, but instead of falling it passed into a hectic fever, which lasted till May 9th, and then suddenly ceased on the removal of the cause of suppuration—viz., the head of the humerus. Rapid recovery ensued. Another clinical feature of interest was œdema of the arm without redness, and with no special fever. This was attributed to thrombosis of the axillary vein, but as it disappeared within a few days of the removal of the head of the bone, some other explanation seemed called for. Mr. Symonds drew attention to the fact that the continued suppuration appeared to be due entirely to the cartilage covering the head of the humerus. This structure was found in a suppurating state, and was being thrown off by granulating tissue, and the moment the entire surface was removed recovery began, and was so rapid that within a few days the patient was up and the parts healed, the man gaining flesh within three weeks. The complication was attributed previously to traumatic fever, which determined suppuration in the wound, and that this, involving the joint structures, the cartilage acting like a foreign body, maintained the suppuration. Mr. Symonds said he now always carefully removed all cartilage in operations involving joints. The man was shown to the Society two years and a half after the operation and had a useful arm. He could do much of the lighter work of his trade, that of a carpenter, being able to drive nails and screws and use a plane. The rhomboid muscle acted well, having obtained a partial attachment, so that both shoulders could be thrown back. He could rotate the shoulder and carry it backwards and forwards, but was unable to raise it from the side. The tumour was a hard osteo-sarcoma, having a basis composed largely of fibrous tissue.—Mr. R. W. PARKER thought that in the majority of cases of malignant tumours it would be better to remove the entire bone. He had removed the scapula twice in children for sarcoma; but the growth recurred. In a child aged thirteen years the right patella was the seat of a sarcoma; no recurrence had taken place after the lapse of nine months. This was the most successful result that he had had in the surgical treatment of sarcomata of bone in children. The success was attributed to its being possible to remove the whole bone.—Mr. CHARTERS SYMONDS explained, in answer to Mr. S. Jones, that the tumour was one of the less malignant forms of sarcoma.—Mr. H. T. BUTLIN referred to a paper on Removal of the Scapula contributed by M. Poinsot to the *Revue de Chirurgie*. Altogether forty cases were collected, some of caries and necrosis, but the majority of tumours. Only two of the patients died as the direct result of the operation. In not a single instance was the operation successful when it was performed for pure sarcoma. The only thoroughly successful case was one of very doubtful nature. He considered that it would be a very inadvisable procedure to remove the entire scapula if the growth were limited to the inferior angle of the scapula. An American author had collected forty or fifty cases of operation on the scapula, and came to the conclusion that removal of a portion of the bone was more dangerous than removal of the entire bone; this might, however, be a mere accident of statistics.—Mr. SIDNEY JONES agreed that the retention of the scapular processes when the tumour of the scapula was of the more innocent kind was advisable.

Mr. THOMAS SMITH read a paper on a case of Ligature of the Common Iliac Artery for Inguinal Aneurysm, with slipping of the Ligature, followed by Gangrene of the Limb and Death. The patient was a discharged soldier, aged fifty-two years, who had served in India, and had had syphilis. For two years he was aware that something had been wrong in his groin, and for two or three months the right lower limb had been much swollen. He had an aneurysm reaching from below Poupart's ligament up to a point midway between the crural arch and the umbilicus; there was a strong pulsation, but no bruit; in other respects he seemed a healthy man. The artery was tied above the aneurysm on Oct. 22nd with a carbolised kangaroo tendon; the pulsation was at once arrested, but the next day the pulsation returned in full force. The artery was again exposed; the ligature was found *in situ* with no appearance of loosening, but the point of an aneurysm needle could be inserted between the vessel and the ligature; it was therefore removed, and two carbolised silk ligatures were placed on the artery, one above and one below the site of the first ligature; pulsation ceased at once. In forty-eight hours the pulsation returned, and continued until the day before death. The limb becoming gangrenous, amputation was performed, but the patient died three days afterwards, and twelve days from the date of the first operation. The post-mortem examination showed that the common iliac had been tied just above its bifurcation; it was closed by clot for half an inch above the upper ligature. The external iliac was dilated in its upper third; its lower two-thirds formed a large fusiform aneurysm, extending beneath Poupart's ligament, and involving the common femoral. The internal iliac was closed by clot for one inch below the ligature; the common femoral was filled with dark adherent clot, as also was the superficial femoral and the profunda. No veins had been injured in the operation: the external iliac vein was normal; the common femoral and its tributaries were filled with clot, the vein being compressed by the aneurysm beneath Poupart's ligament. There was no general peritonitis, but some matting of the intestines in the immediate neighbourhood of the ligature. The aneurysm was filled with a firm clot, a large part of which was laminated. The fatal issue of the case was primarily due to pressure on the main vein causing gangrene of the limb, one of the most common causes of death in aneurysms in this situation. Mr. Smith attributed the yielding of the ligature to the slippery nature of the material used; the wound being very deep, it was probable that the first loop of the knot slipped to some extent before the second knot could be tied, and though for a time it controlled the pulsation, it probably yielded to a small extent afterwards; the artery being very large, the knot was subjected to a considerable strain. He called attention to the defects in the method of applying ligatures to large arteries in their continuity by the single thread fastened by a reef knot. The object of the ligature being to constrict the vessel evenly at all points of its circumference, so that no one part of the vessel is pressed upon more than another, he maintained that the ordinary ligature did not fulfil these conditions; but that the knot dinted in the arterial coat where it lay over the vessel, and that when the ligature divided the artery it was the knot that first penetrated the canal of the vessel; he also pointed out that where secondary hæmorrhage occurred, it was usually at the site of the knot. As a remedy for this he recommended that the

ligature should be passed twice round the vessel as a clove hitch, and the opposite ends be pulled firmly across the artery; this ligature, having no knot, compresses the artery evenly at all points of its circumference, and is very firm and tenacious. He believed it to be quite trustworthy. Notwithstanding the accidents that occurred in the case related, Mr. Smith still believed the aseptic kangaroo tendon was the best material we possessed for the ligature of large arteries in their continuity, and that there was no fear of its slipping if the manner of securing it was adopted which he advocated. But if this method was not considered secure enough, the ends of the clove hitch could be tied in a single knot after pulling the clove hitch tight; this, he believed, to be superfluous; but if it were done, the knot would not be in contact with the arterial walls and could do no harm. The views he entertained, he believed, derived additional importance from the publication of Dr. Edmunds and Mr. Ballance's paper, as they had proved that it was not necessary or desirable to injure the coats of an artery in order to secure a permanent obliteration of its canal.

Mr. BUTLIN read a paper on a case of Axillary Aneurysm, for which the subclavian artery was ligatured in the third part of its course, in which slipping of the ligature occurred shortly after the operation, and after re-ligature was followed by collapse and death. The subclavian artery was tied in the third part of its course by Mr. Butlin for an aneurysm of the axillary artery in the axilla. The artery was large at the seat of ligature and was slightly adherent to its sheath, but no difficulty was experienced in performing the operation. A slightly flattened kangaroo tendon was used. The artery was tied in two places with an interval of about two-thirds of an inch between the two ligatures, and the vessel was divided. Half an hour after the operation violent hæmorrhage occurred, and was controlled with difficulty by means of pressure. It was found that the ligature had slipped off the proximal end of the divided artery. A silk ligature was applied, but not before a large quantity of blood had been lost. The patient died the same night. The knot of the kangaroo ligature had not slipped, but the ligature had slipped over the end of the retracted artery, probably from being drawn up against the outer border of the scalenus anticus muscle. The hæmorrhage was immediately preceded by a violent fit of coughing. It was not possible to ascertain, either during the application of the second ligature or at the post-mortem examination, whether the kangaroo tendon had divided the middle and internal coats of the vessel, but the sensation communicated to the operator was that they were not divided. The case is related to show that it is not safe to employ a ligature such as kangaroo tendon in the tying of a large artery when the vessel is divided. Even if such an incident as that which has been related had not occurred, the knots tied in these ligatures are apt to slip. The case cannot be employed as an argument against either the kangaroo tendon or against the division of the artery between two ligatures; but may be used against the combination of the two methods.—Mr. CROFT inquired the condition of the artery within the grip of the ligature in Mr. Smith's case, and whether the internal and middle coats were divided. In April, 1881, he had used flat kangaroo tendon to the external iliac artery for aneurysm of that artery. He had made a second knot in this case because the material seemed slippery and elastic; it was intended that the middle and internal coats of the artery should be divided, but whether this happened or not he could not say, as the man made a perfect recovery. His bias was in favour of double ligature with division of the vessel between. He had used this method but once, and this in ligature of the common carotid artery. In ligature of an artery for a fusiform aneurysm recurrence of pulsation was not perhaps surprising, and this without supposing that the ligature had slipped.—Mr. CHARLES BALLANCE said that in the ligature of large arteries in their continuity in horses, donkeys, and sheep kangaroo tendon was perfectly efficient, and caused perfect occlusion of the vessel without risk of ulceration and without rupturing the internal coats. Kangaroo tendon loses its glistening appearance, and becomes opalescent and somewhat rough, if placed for a short time in a solution of corrosive sublimate. He had seen kangaroo tendon used to ligature the femoral artery in a case of popliteal aneurysm, and with complete success. In another case the same kind of ligature was used for hæmorrhage, the femoral also being the artery tied. The boy died, but the vessel was found to be occluded without rupture of the coats. He considered that the reef knot was a very good one, and could be employed without damage to the arterial coats. He hoped to have the opportunity, however, of trying Mr. Smith's clove hitch. In Mr. Butlin's case he would not have divided the vessel, but would have trusted simply to the kangaroo ligature.—Mr. BARWELL commented on the return of the pulsation in twenty-four hours in Mr. Smith's case, and thought this could not have been the result of slipping of the knot. In his opinion the recurrence of pulsation should be attributed to the setting up of an unusual collateral circulation. Knots of kangaroo tendon or ox-aorta ligatures do not "eat" or "cut" into the coat of the vessel like the knots of smaller ligatures. In a case of ovarian tumour, where the pedicle was tied with a thick piece of catgut in a perfect reef knot, Mr. Barwell thought there was evidence at the necropsy that the length of the ligature within the knot had increased. He could not concur in the opinion that the clove hitch would prove of service in ligature of arteries in their continuity.—Mr. SIDNEY JONES related his experience of ligature of the vertebral artery. In one case there was severe hæmorrhage, doubtless due to ulceration of the vessel. If he should have to ligature an artery so tightly stretched as the vertebral artery again, he would apply two ligatures and divide the vessel between. Reference was made to a case of deligation of the subclavian artery for axillary aneurysm; the artery lacerated whilst the aneurysm needle was being passed. Fortunately he was able to apply chromicised catgut ligatures above and below the rent in the artery, and so stopped the hæmorrhage. No further serious symptoms occurred, and the wound healed naturally.—Mr. HENRY MORRIS said that the knot could cause an injury to the wall of the vessel; in one case, in which chromicised catgut was used to the femoral artery for popliteal aneurysm, the artery ruptured; it had to be ligatured above and below and the artery divided between the ligatures. In deligation of arteries in their continuity, he advocated the use of kangaroo tendon and division of the artery between the ligatures. The degree of pressure which could be exerted by kangaroo tendon was very much less than that produced by catgut or silk. In his opinion the ligature had been applied sufficiently tightly in Mr. Smith's case. It was not an uncommon circumstance for pulsation to reappear in twenty-four hours, and it often subsided later on of its own accord.—Mr. SMITH, in reply, said he could not state certainly whether the internal coats were divided by the kangaroo ligature, but he thought not. In the practice of applying two ligatures and dividing the artery between, he was but following the method of Celsus, Galen, Ambrose Paré, and Paulus Ægineta. The tendon had a glistening appearance, though it had not been kept in carbolic oil, but in a watery solution of carbolic acid. In Mr. Ballance and Dr. Edmunds' experiments, it was found that the knot region of the outer tunic had given way; he agreed that this risk was less with kangaroo ligatures than with others. As he would be happy to show Mr. Barwell, the clove hitch could make a very firm knot.—Mr. BUTLIN said that he had no doubt of the slipping of the ligature in Mr. Smith's case; the pulsation in the aneurysm was as forcible as ever twenty-four hours after the deligation. If the return of pulsation was due to the establishment of collateral circulation, he asked how it was that the application of fresh ligatures with division between could be followed by the cessation of pulsation for a period of forty-eight hours, as was actually the case. A kangaroo tendon was liable to slip, and he ventured to think that, if silk had been used in his own case, the event would have been very different.

The following living specimens were shown:—Mr. Stephen Paget: (1) A mother with two children, all three presenting Congenital Absence of the Irides; (2) Pigmentation of Conjunctivæ. Mr. Keetley: Erasion of the Condyles of the Femur for Strumous Disease, there being no shortening of the limb, as there would have been had excision been performed.

MEDICAL SOCIETY OF LONDON.

Paralysis Agitans.—Aneurysm of Aorta.—Pouch of Penile Urethra.—Tubercular Disease of Ankle-joint.—Carcinoma of Prostate.

A CLINICAL MEETING of this Society was held on Monday last, Mr. R. Brudenell Carter, F.R.C.S., President, in the chair.

Dr. SAMUEL WEST read a case of Paralysis Agitans of ten years' duration, which began immediately after the receipt

of an injury inflicted by the pole of a waggon. The patient, a cabman, aged fifty, was seen at St. Bartholomew's Hospital ten minutes after the accident, and there was then rapid tremor of the right hand and arm. The temperature in the right axilla was a degree higher than that of the left. There was some loss of sensation in the right arm. The leg was the seat of a few tremors. An abscess formed over the sacrum, but healed in a week. The patient was under observation for some months from the time of the accident. At the end of six months the left side had become affected with tremors. The case has progressed but slowly for the last eight years. The cardinal symptoms were well marked.

Dr. THEODORE WILLIAMS exhibited a case of partially consolidated Aneurysm of the Transverse Portion of the Arch of the Aorta. The patient, a man (who was shown), aged forty-two, a waiter, with a history of rheumatic fever, had complained for one year of pain in the chest, cough, and more recently of short breath and slight dysphagia. He was admitted into the Brompton Hospital in July, 1885, and the diagnosis was aneurysm of the transverse portion of the aortic arch pointing in front, pulsation being visible in the upper three intercostal spaces on the left side. Under treatment by rest and iodide of potassium the patient greatly improved; the dysphagia ceased, and the pulsation became less visible, but irregularity of the size of the pupils was noted before he left the hospital, which he did four months later. He resumed his occupation to a limited extent, but, being attacked with fainting fits, was readmitted in October, 1886, with stridulous breathing, dysphagia, and some dyspnœa, unequal pulses and pupils, the left pupil being widely dilated. Dr. Williams found the aneurysm still tolerably solid in front; it had extended backwards, and involved the recurrent laryngeal nerve, giving rise to fixation of the left vocal cord and great stridor of breath. There was also evidence that the trachea was pressed on. The points of interest in the case were—1. The rapid consolidation of the sac in front, and the cessation of the dysphagia during the patient's residence in hospital. 2. The stability of the clot, even under the unfavourable circumstances of his occupation. 3. The rapid extension of the aneurysm posteriorly at a later date.—Dr. SYMES THOMPSON referred to treatment other than iodide of potassium: complete rest in the recumbent posture and very low diet.—Dr. A. MONEY asked what the position of the vocal cords was.—Mr. JAMES BLACK inquired for the presence of cough in this case.—The PRESIDENT referred to the works of Tufnell, who advocated measures calculated to give the body the most complete rest.—Dr. WILLIAMS, in reply, said that the left vocal cord was in the cadaveric position. The patient had a cough of laryngeal quality.

Mr. E. HURRY FENWICK showed a case of Pouch of the Penile Urethra in a patient aged fifty-seven, who had suffered from stricture for the last eighteen years. The difficulty of micturition culminated in extravasation of urine a year and a half ago. Perineal incision was performed, and a large sac with several small facetted stones and one large one were removed. Urethral fever followed, but the man ultimately recovered. The pouch was probably due to distension of the canal behind an anterior stricture. It was proposed to pare the edges of the antescrotal sac at the same time that the bladder was drained through the perineum.—Mr. J. H. MORGAN considered that Mr. Fenwick's explanation of the nature of the pouch was correct. Instead of performing any cutting operation, he would be inclined to employ steel sounds with a view to dilating the strictures, and trust to the mechanical stimulus to improve the tone of the muscular coat.—Mr. BRUCE CLARKE thought something more than sounds and catheters would be required: excision of a portion of the urethra and joining together the cut ends.

Mr. E. HURRY FENWICK also showed a case of Strumous Disease of the Tibia and Ankle-joint. Amputation was considered necessary; but on making the requisite incision it was thought that arthrectomia synovialis would prove more successful than having recourse to amputation. The lower end of the medulla of the tibia was scraped away with the curette.—Mr. KEETLEY confirmed the statement that removal of the diseased medulla was a perfectly safe procedure, and indeed to be desired, as likely to make the case more successful. It did not prevent perfect healing of the bone.—Mr. W. ADAMS spoke of the success of the case, which was mainly due to free incisions.—Mr. FENWICK, in reply, said that Mr. Keetley's suggestion to scrape out the medulla even in cases of acute osteomyelitis was a most valuable one.

Mr. E. HURRY FENWICK also brought forward a case of large Inguinal Hernia, which had developed for the most part during the last six months, apparently as the result of straining; there was found to be carcinoma of the prostate.—The PRESIDENT asked whether there were deposits of cancer elsewhere in the body. He had seen a case in which double optic neuritis led to the belief that there was an intracranial tumour.—Mr. B. JESSETT had seen two cases of carcinoma of the prostate. Was there any cystitis?—Mr. BRUCE CLARKE mentioned cases in which there were secondary deposits in many organs.—Dr. S. WEST mentioned a case of very rapid growth in a young man aged about twenty.—Mr. FENWICK had seen secondary growths in the liver.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

The President's Address.

A MEETING of the above Society was held on **Friday**, Oct. 8th, Dr. F. H. Alderson, President, in the chair.

Dr. Alderson selected for the subject of his inaugural address "The Wants of the General Practitioners of the day." He considered as perhaps the greatest and most general want was that of a larger income. Amongst the causes of diminished medical incomes, Dr. Alderson mentioned the crowded state of the profession, giving some statistics to verify what he considered might be accepted as an axiom, but asked, "Has it not become a question for our direct medical representatives *in futuro* whether some steps should not be taken by our somewhat torpid Medical Council to reduce this excess and to bring our too easily made doctors more within the requirements of the public and profession? for excess in numbers means poverty in quality." Dr. Alderson suggested that the arts examination of the medical student should not be passed before the age of eighteen or nineteen; that the first class second division of the College of Preceptors should be the lowest standard for acceptance for registration by the Medical Council; that some knowledge of Greek should be required of every aspirant to medicine; and that one or two years should be spent either as an assistant to a medical man, or as house-surgeon, house-physician, or resident obstetric assistant at a hospital, after the usual hospital curriculum was completed, before commencing independent practice. Other important causes of reduced incomes were the improved health of our cities and towns, and for this reason he advocated the principle of "health assurance"—i.e., the practice of paying medical men annually, ill or well, a certain fixed payment, which, if universal, need not be large. Amongst the propositions suggested for the expansion of medical incomes was that of the appointment of pathologists in every district, and likewise of school visitors and of School Board examiners, from the ranks of medicine. Death certificates ought to be paid for; they would then become more valuable, because perhaps they would then be more accurately and less hastily written. Dr. Alderson thought all hospital appointments should be paid for; more time and thought could then be given to hospital patients. A great grievance under which general practitioners laboured was the rule by which many hospitals exclude everyone in general practice from being eligible for either the post of physician or surgeon. By such a regulation he considered surgical skill was limited and surgical knowledge narrowed. By Dr. Alderson's suggestion of every man in general practice who desired it becoming a public vaccinator he believed the compulsory nature of the Act would appear to be considerably lessened, the supply of lymph would be much greater, vaccination would be more efficiently performed, and the Act become much more popular. In respect to the ethics of consultations, the speaker thought consultants should more frequently, and indeed perhaps always, follow the practice of certain leading physicians, who invariably send their prescriptions, accompanied by a courteous letter to him, even when his patient had applied to them *sponte sua*, and even without his knowledge. Home, fever, and private hospitals and dispensaries were regarded by the President as antagonistic to the interests of the general practitioner. The recent passing of the Medical Act Amendment Bill was

alluded to. Dr. Alderson considered there was much that was wanting, but he thought by a wise selection of our direct medical representatives the Act might become both powerful and effective. The Lunacy Act Amendment Bill was still waiting completion, and medical men hesitated to sign certificates, yet he believed that the time was not far off when (if the profession be not relieved of this duty) every medical man who in good faith signs a lunacy certificate would be secured from vexatious actions on the part of the assumed or recovered lunatic or his friends. He would institute mental sanatoria for cases of temporary insanity where no patient could remain longer than one calendar month, which he believed would in many cases be sufficient for the recovery of the patient, and by this great distinction from asylums would do much to lessen or obliterate the stigma which is now so unfortunately attached to even a temporary abeyance of intellectual function of many a promising and incompleted life. The address concluded with an urgent appeal to every member of the Society to assist in the discussion of subjects brought forward at its meetings.

On the proposition of Dr. THUDICHUM, seconded by Mr. LAWRANCE, a hearty vote of thanks was accorded Dr. Alderson for his able and comprehensive address. Upwards of fifty members were present.

OPHTHALMOLOGICAL SOCIETY.

Orbital Tumour. — Ophthalmoplegia Interna. — Retinitis Pigmentosa.—Optic Nerves in Head Injury.—Ophthalmoplegia dependent on Thrombosis of Cavernous Sinuses.—Hypertrophy of Lacrymal Glands.—Penetrating Wounds treated by Suture.— Complete Ophthalmoplegia with Ptosis and Blindness (? hysteria).

THE first ordinary meeting of this Society was held on the 21st inst., Dr. George Johnson, Vice-President, in the chair.

Dr. JOHNSON made some remarks on the chronic latency of Renal Disease, which was sometimes first diagnosed by the ophthalmic surgeon discovering albuminuric retinitis, the foundation of kidney disease having been laid in scarlet fever or diphtheria many years previously. The urine should be examined in all cases of illness.

Messrs. CRITCHETT and H. E. JULER showed a living specimen of Proptosis of the Left Eyeball, associated with swelling in the zygomatic region. The disease began as a chemosis of the outer canthus; protrusion of the eyeball followed and the zygomatic region began to bulge. These swellings increased, including the chemosis; the tissues at the outer canthus had a deep blue aspect. At first, and for some time after, there was no diplopia. The proptosis, which began in August, 1885, had increased for twelve months. The movements of the eyeball were greatly limited. Diplopia occurred on looking to the left. The cause of the disease was unknown. Iodide of potassium in ten-grain doses three times a day was the only remedy used, but the tumour only began to subside in August, 1886. The patient was a ballet-dancer. In reply to Mr. Nettleship, it was said that the iodide was begun early; and in reply to Mr. Power, that there was no pulsation.—Mr. CROSS mentioned a somewhat similar case in a man in which the growth gradually subsided, but not apparently as the result of the administration of iodide of potassium.

Mr. ADAMS FROST showed a case of Ophthalmoplegia Interna of the Right Eye. Near vision of the eye had been defective for three or four months. The right pupil measured 3·5 mm. and was always immobile. There was complete loss of knee-jerks, but no other signs of locomotor ataxy or other nervous disease. He had not had syphilis.—Dr. SANSOM asked for lightning pains; Dr. ORMEROD for a history of diphtheria; Dr. BERVON whether the optic nerve was atrophied. A negative reply was given to these questions.

Mr. ADAMS FROST exhibited a living specimen of Retinitis Pigmentosa, with deposit of pigment on the anterior surface of the lens, in a man aged thirty-five, who had had "night blindness" for years. He had had iritis in 1879.

Mr. STANFORD MORTON showed a modification of his Ophthalmoscope, which allowed of rapid changing of the mirror without risk of accident.

Messrs. EDMUNDS and LAWFORD read a communication on Optic Neuritis in Head Injuries. This was based on the examination (ophthalmoscopic or microscopic) of the optic nerves in twenty-four cases. The microscopic evidence of neuritis is a considerable increase of staining corpuscles in the sheath-space and in the nerve. The cases were divided into three groups. 1. Those fatal directly from the severity of the injuries. 2. Those fatal indirectly from complications. 3. Those in which recovery took place. The neuritis was thought to be due to an extension of inflammation from the seat of injury to the optic nerves, which extension might be conceived to take place either along brain tissue (cerebritis) or along the meninges (meningitis). The authors contended that the latter path was that along which the inflammation spread, because an analysis of the cases proved that optic neuritis occurred far more frequently in those cases in which the base of the brain or skull was involved than in those in which the lesions were confined to the convexity. This fact was especially evident in the cases of Group 2 (four in number). Two of these were cases of punctured wound of the convexity of the brain followed by cerebral abscess necessitating trephining; hernia cerebri occurred, and finally death. In neither was there optic neuritis. The other two were cases of severe compound fractures of skull, with injury to the base by contrecoup, and post-mortem lesions at the base were found. In both of these there was optic neuritis. The microscopical appearances of inflamed optic nerves were shown by diagrams.—Dr. BRAILEY inquired what explanation Dr. Edmunds gave of the different histological appearances in different cases of optic neuritis; in some the sheath was more affected, in others the trabeculæ of the optic nerve itself.—Mr. A. QUARRY SILCOCK asked whether there was any meningitis in the cases without optic neuritis due to injury of the convexity of the brain.—Dr. EDMUNDS, in reply, said there was meningitis about the convexity, but not at the base. The different histological appearances were probably to be attributed to the different stage of the disease in different cases.

Dr. SIDNEY COUPLAND read a paper on a case of Ophthalmoplegia dependent upon Thrombosis of the Cavernous Sinuses. It occurred in an unmarried woman, forty-three years of age, who was admitted into the Middlesex Hospital under his care on March 10th, 1886, suffering from cerebral symptoms, including bilateral ophthalmoplegia. Her previous health had always been good, and, beyond the fact that her father and one of her brothers were said to have died of consumption, there was an absence of any inherited taint in her history. There was no evidence of syphilis. It was ascertained that in the months of January and February she had attended Moorfields Hospital, under the care of Mr. Hulke. From notes kindly furnished by Mr. W. Gay, her condition during this period may be summed up as "proptosis and more or less complete ophthalmoplegia externa of the left eye, following great supra-orbital pain, succeeded by proptosis of the right eye, with ophthalmoplegia externa and (?) interna, but with no distinct ophthalmoscopic changes." The symptoms had commenced with headache and deafness of the left ear four months before any ocular trouble; iridiplegia and strabismus, and then left ptosis, supervened. When admitted into the Middlesex Hospital she was in a drowsy condition, but pointed to the right side of the forehead when questioned as to pain. The face was dusky; but there was no enlargement of veins around the orbits or elsewhere, and no œdema of lids; marked proptosis of each eyeball; complete ptosis of right lid, partial of left. Right eye absolutely immobile in any direction, and the left only retained a slight power of movement inwards. Both pupils were large, the right more dilated than the left; total reflex iridiplegia. No optic neuritis, or other notable ophthalmoscopic change; veins not dilated; ocular conjunctiva, especially of left eye, injected; on each side it was quite insensitive. Cutaneous sensibility of left side of face impaired, as compared with right, but not wholly abolished. No facial paralysis. Deafness, but degree could not be ascertained. No otorrhœa; some dysphagia. Tongue protruded straight; arms semiflexed; slight rigidity. Legs flaccid, but movements controlled by patient. No plantar reflex on right side, and but slight on left. Abdominal and epigastric reflexes absent on both sides. Knee-jerks absent on both sides; no ankle-clonus. Cutaneous sensibility impaired over lower limbs and trunk; loss of voluntary control over bladder. Next day, the patient lay with her head turned to the left, and cried out with pain if it were moved. This symptom remained till death, which occurred on March 12th, in coma. Towards the close, the left conjunctiva became chemosed.

At the post-mortem examination, there was found basic meningitis (both arachnitis and leptomeningitis) of recent date; no tubercle. The pituitary body was enlarged. The cavernous sinuses were plugged with old caseo-purulent and colourless thrombi; and so were the circular and transverse sinuses. The petrosal sinuses were empty. No disease of cranial bones or of internal ear could be detected. The cerebral ventricles were distended with fluid. No lesions in brain; broncho-pneumonia of recent date in left lower lobe; slightly granular kidneys. Thus no cause of the thrombosis was discovered, and the clinical course, as well as the character of the exudation, proved that the meningitis was far more recent in origin than, and probably secondary to, the thrombosis. The ophthalmoplegia, at first unilateral and then bilateral, is explained by the complete obliteration of both sinuses, the thrombosis starting in the left sinus. The absence of "choked disc" accords with general experience, being attributable to the free inosculation of the facial and orbital veins; and to the same anatomical conditions may be ascribed the absence of œdema of the eyelids. Nor was the degree of proptosis much, if at all, more than might be ascribed to the ophthalmoplegia. The abolition of many of the spinal reflexes was not explained; nor was the symptom of deafness, which occurred early in the case. The paper concluded with a review of the causes and symptoms of thrombosis of the cavernous sinuses, with especial reference to the symptom of ophthalmoplegia. In reply to Mr. Nettleship, Dr. Coupland said there was one other case on record pretty much like his own.—Mr. LANG spoke of a case of thrombosis of the cavernous sinus in an elderly man; there was marked proptosis; the patient had muttering delirium, and died comatose. The cavernous sinus on the right side was thrombosed; the ophthalmic vein was not plugged; there was no disease of the bones.

Mr. HENRY POWER exhibited a boy, aged fourteen, in whom both lacrymal glands were enlarged. Enlargement of this gland was a rare condition, especially when symmetrical. The inunction of mercurial ointment and the application of tincture of iodine to the skin effected no reduction in the size of the glands. Tears began to flow from the left eye, and much discomfort was experienced, and so about two weeks ago the gland on the left side was removed through the skin, not the conjunctiva or external canthus, as some had recommended. The operation was completely successful; no trouble was experienced in regard to moisture of the cornea and conjunctiva. No cause was known. The lacrymal gland was probably only of service for emotional purposes.—Mr. MCHARDY mentioned the case of a solicitor of advanced age, in whom swelling of the gland occurred as the result of sudden emotion; it subsided slowly without special treatment. He had observed collections of tears, in cases of removal of the gland for injury, due to portions of gland left behind.

Mr. CROSS of Bristol showed two cases of Penetrating Wound of the Eyeball, with escape of vitreous, resulting, after suture of the sclerotic, in recovery with useful vision: The success in these cases seemed to prove that ophthalmic surgeons ought to be conservative in their treatment of large wounds of the eyeball, especially if the ciliary region be not implicated.—Dr. W. A. BRAILEY mentioned a case of severe penetrating wound of the eyeball with protrusion of vitreous, in which the conjunctiva only was sutured over the gaping wound. To his surprise and pleasure, the wound healed with fair vision, and the tension was nearly normal, though the edges of the rent in the sclerotic had not united. —Dr. P. H. MULES mentioned two cases of foreign body in the eyeball in which he incised the sclerotic, and extracted the steel with the aid of a magnet. He thought early operation was one of the chief elements on which success was dependent.

Dr. W. A. BRAILEY read a case of rapidly occurring Blindness and complete Ophthalmoplegia on one side. The patient was a single woman, aged fifty, who complained of pain round the left orbit and numbness of the left side of the head three months ago. One month later she came to Guy's Hospital stating that she had also pain in the left eyeball, which was always much more severe about 4 A.M. Distant vision, after the correction of some hypermetropic astigmatism, was perfect. The right eye was totally blind, as the result of a blow with the cork of a soda-water bottle some twenty years ago. The movements, and those of the lids, were, and have since remained, perfect, except that the internal rectus seems weak; its pupil is occluded and the iris bulged. Tension normal. No other morbid condition can be found. Patient's manner is very quiet and rather constrained. Again, three weeks later (five weeks ago), her friends noticed that the left upper eyelid drooped, and she complained of the sight being gradually worse till two and a half weeks ago, when it deteriorated very rapidly. Three days later (Oct. 8th) she was led into the out-patient room totally blind. The right eye and lid moved as before, but the left lid drooped. The eye was immovable, and the pupil was three parts dilated and fixed. The conjunctiva and skin appeared even more sensitive than normal. The fundus was normal. She was admitted as an in-patient and blistered that evening. The next day (Oct. 9th) the outward movement of the eye and that of the pupil was still absent, but the other movement had come back. There was still no perception of light. She was treated with iodide of potassium and perchloride of mercury and the vision slowly returned, but there was still considerable defect. She can count fingers, but does not seem to see a light, or at least replies in uncertain fashion. There was no definite evidence of syphilis, but, though single, she had had two children. Dr. Brailey had, like others, seen many cases of blindness of one eye, and many cases of ptosis. He had observed also two cases of one inferior rectus which from the appearances and after-history appeared to be hysterical, but never a case of complete ophthalmoplegia externa or interna. Simulation appeared to him to be out of the question, though many points in her answers to the test of vision were unsatisfactory. The case was, however, at present incomplete.—Dr. SHARKEY referred to a curious case reported by Dr. Bristowe; there was ophthalmoplegia and profuse hæmorrhage from the ears, and the necropsy failed to reveal any sign of disease in any part of the nervous system.—Mr. ADAMS FROST inquired as to the precise state of the field of vision.—Dr. BRAILEY, in reply, said that it was impossible to ascertain the exact state of the field of vision owing to ambiguity in the replies of the patient.

READING PATHOLOGICAL SOCIETY.

AT a late meeting of this Society Mr. BARFORD, of Wokingham, read a paper on Infant Mortality in the Borough of Reading. The inhabitants of the borough of Reading, he said, may be fairly congratulated on their public spirit, and the right appreciation of their responsibilities, as displayed in an improved system of sewerage, at a cost of £320,000 sterling, and therefrom an appreciable lessened death-rate. The mortality stood for the twenty years between 1850 and 1870 at 22 per 1000, having previously been as high as 24 per 1000; while during the ten years between 1870 and 1880 it has been reduced to an average of 19 per 1000, and since then in one year it reached a death-rate as low as 14 per 1000. Such a result should be a sufficient satisfaction to the inhabitants of the borough for their large expenditure and consequent heavy rating. It represents the saving each year of more than 100 human lives, for, as the mean population of Reading during the period under consideration averaged 38,000, a reduction of the death-rate by 3 in the 1000 gives the result mentioned. A comparison of the death-rate of Reading with two other registration districts in the county, Wallingford and Abingdon, is favourable to Reading, though both these towns are far less populous. This Society may fairly look to any of its members who practise in or around Wallingford and Abingdon for information, which they above all others must possess, which may afford a clue to the cause of this higher death-rate in Wallingford and Abingdon. Yet, with a higher general mortality, both these towns have a lesser infant mortality than Reading. But while Reading compares favourably in the general death-rate with two other registration districts in the county, it compares unfavourably with nine others. The general death-rate in Reading is higher than in the districts of Newbury, Hungerford, Farringdon, Cookham, Easthampstead, Bradfield, Wantage, Wokingham, and Windsor. The infant mortality is very much in excess of these. Taking the two registration districts adjacent to Reading—that is, Wokingham and Bradfield—the annual mortality in these is in one instance 15 per 1000, and in the other 16 per 1000, while Reading for the same period stands at 19 per 1000. As originally the death-rate in Reading was 24 per 1000, and has now been reduced to 19, the question may fairly be asked of members of this Society, Can any further reduc-

tion be effected to make the death-rate of Reading approach still nearer the lower death-rates of the adjacent districts of Bradfield and Wokingham? Cannot this be aided by lessening the large infant mortality in Reading? I anticipate that one answer to the questions will be, that Reading is a thickly-populated town, while the other districts are more or less rural. This leads me to a comparison between Reading and Bedford, which resembles it more than any other town I am acquainted with. The population of the registration district of Bedford is 42,000, that of Reading district 38,000. Thus, a comparison should be a little in favour of Reading. Both towns have points of resemblance, though they differ in size; they are the centres of considerable, but not unhealthy, manufacturing industries; there are large schools attracting pupils from all parts; both have streams running through them; both are thriving, well-to-do towns, in which poverty should be reduced to a minimum; in each there is a county hospital. Why, then, is it that in Reading from thirty-eight to forty human lives are sacrificed every year over and above what takes place in Bedford? Is it not a fitting labour for this Society to sift out the causes of this higher mortality? Already, I think, one of our junior members has given a clue to one cause, in his reference to the high infant mortality in Reading—fed, as he assured us some infants are, on pap and gin. If the infant mortality in Reading be traced, it will be found to be higher than any other district of the county. Out of 1000 infants born in Reading, no less than 139 die during the first year of their existence, while in an adjacent district only 99 die out of every 1000. Here, then, is one source of a higher death-rate in Reading and a sad reflection on maternal care. The marriage-rate in Reading is a high one, for it amounts to 19 per 1000 persons living, as compared with 11, 12, and 13 in other districts of the county. This is held to be a fair indication that the people are well occupied and well-to-do, and therefore able to afford nurture for their offspring. The birth-rate in Reading is low compared with the marriage-rate. Some explanation may be afforded by this Society of the low birth-rate compared with the high marriage-rate. Why should fewer children be born in Reading, as compared with the number of marriages, than elsewhere in the county? Why should a larger proportion of children born die in the first year of their existence? What are the barriers to conception?—are they natural or artificial? This Society can answer those questions. Here is subject matter for thought, for the moralist and philanthropist, for the clergy, for right-minded matrons, as well as for doctors. Are the mothers of infants drawn off from their domestic duties to the factories? If so, could not the crèche system be established in Reading? There is a benevolent Mayor of the town, deeply interested in all movements for the public good. The chiefs of the manufactories are benevolent also. Do their works attract mothers through a love of gain, or through necessity, to the neglect and death of their infants? If so, a committee formed of the borough member, the Mayor, and some of the larger employers of female labour, of a few of the clergy and medical men of the town, would be sufficient to deal with this subject, and remove the slur of an excessive infant mortality from the town of Reading. The lives of at least forty infants might be saved every year. Each life has a distinct commercial value to the State. Thus upon the lower grounds of finance these lives are worth preserving. Each premature death is a reflection on us as a profession; it is therefore our duty to contend with the cause. Is sufficient care taken in giving certificates of the cause of death? Are investigations by inquest evaded? The greatest safeguard against an excessive infant mortality is a full and impartial inquiry into the cause of uncertified death. It is clearly the duty of all the members of this Society practising in Reading to exercise the greatest vigilance in all matters affecting infant mortality. Cannot these facts be represented to the coroner? There are forty lives to be saved each year within the borough among children under one year old. Here, then, is work enough for a time, apart from what I propose on a subsequent occasion to consider under the head of "Special Disease Tendencies." The borough is watched over by a medical officer of health in whom we all have confidence. Cannot this Society aid him in his efforts to lessen the death-rate by some action outside his legitimate sphere? To this end it may be asked, Why should the connubial disposition be above the average? Why should procreation be below the average? Why should maternal care be inadequate to the average preservation of offspring? These questions the Pathological Society of Reading can answer. It may be the means of saving many a life now sacrificed.

New Inventions.

A NEW SPLINT FOR COLLES' FRACTURE.

As a general rule, the more methods of treatment advocated in any surgical injury, the more proof it is that none meet all the requirements of the case. So it is with Colles' fracture. We have the pistol splint, Carr's splint, Gordon's splint, and many other varieties, all recommended more or less by different surgeons, but none seem to give universal satisfaction. This it is that has led me to recommend yet another form of splint, which I have found extremely efficient. The requirements of a good splint are simplicity, lightness, ease of application, and maintenance of the bones in position by counteracting the distorting forces. I think the splint I recommend combines these qualities. In Colles' fracture we have a triple displacement. The lower fragment, the hand with it, is displaced upwards and inwards; the lower end of the upper fragment is thrown forward on to the front of the wrist, chiefly by the action of the pronators. These displacements must all be remedied; consequently the pistol splint was made with a curve to the ulnar side, and Gordon's splint has an antero-posterior curve, each tending to overcome individual displacements. The accompanying woodcuts will show that the splint recommended has a double curve, antero-posteriorly

FIG. 1.

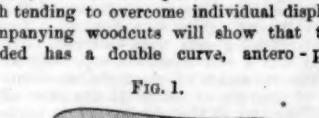

FIG. 2.

and to the ulnar side, and the hollow for the ball of the thumb allows the hand to be maintained in complete pronation without injurious pressure on that part. It is easier to pronate the hand to meet the shaft of the radius than to supinate the shaft to meet the lower fragment.

Fig. 1 represents a front view of the splint, and shows the antero-posterior curve; Fig. 2 represents a back view, and shows the lateral curve. In applying the splint, the displacement is reduced and the hand laid on the splint, so that the ball of the thumb fits into the hollow, and the fingers grasp the end so that it lies across the line of the carpo-phalangeal joints; a small pad of lint may be placed on the dorsum of the lower fragment of the radius, and a bandage applied over the whole. After the fourth or fifth day the fingers may be loosened, and a bandage applied from the back of the hand upwards, so that the fingers may be regularly moved without disturbing the fracture. The lower surface of the splint consists of a thin sheet of metal, the upper surface of a layer of cork, which can be cut to the required extent for the ball of the thumb. It is easily and cheaply made, Messrs. Aitken and Co., of York, making them at the small cost of 15*s.* 6*d.* per set of six pairs.

HERBERT BRAMWELL, M.B.CH.,
House-Surgeon, Newcastle-on-Tyne Infirmary

THE LANCET.

LONDON: SATURDAY, OCTOBER 30, 1886.

INTER-RELATIONS OF MEDICINE AND SANITATION.

In a sense medicine is something different from sanitation, because the cure of disease, popularly at least, appears to be a matter by no means identical with its prevention. This is, however, only so far as appearances are concerned. In truth and fact, the cure of disease is a part of sanitation, and as further progress is made in the science and art of healing it will be demonstrated that the only real cure for disease is the re-establishment of health. Disease is not an entity. It is not a thing apart from the organic life and function of the body affected, but a state or condition, either structural or functional, which is incompatible with the orderly processes of life. And it is in the change of this state or condition, so as to place matters on a footing of health, that "cure" must consist or amelioration be accomplished. In short, the physician is a minister of health to the sick, by abrogating what is unhealthy and re-establishing health. The old notion of fighting "disease" as an antagonistic force has been superseded, in the progress of science, by one of repairing or readjusting that which is injured or out of order. This change of method in connexion with the treatment of disease has necessitated a reconstruction of the whole system of medicine, and it is on this that the scientific revolution which has been proceeding during the last fifty years has been based. The change is even greater than many of those who have been the subjects of its influence adequately realise. We have, so to say, been carried from north to south, the direction of our progress being almost completely reversed, but so gradually that not only has there been no revulsion of feeling, but we have scarcely been conscious of the change. One of the most remarkable and yet unappreciated effects of the change of front accomplished has been to convert the army arrayed against disease into a pacific body bent mainly on the prevention of that very war in which our predecessors gloried. To the interests of the population at large the consequent gain has been enormous, but it cannot be disguised that upon the profession there has been entailed a loss of both prestige and recompense, which is only just beginning to be realised. The policy of the day—in Physic at least, for Surgery in great part stands on another footing—is one of self-effacement. If only that policy could be thoroughly carried out, the issue would be to abolish disease, and thereby, as it would seem, to put an end to the need of doctors. In proportion as it is possible to give effect to the policy adopted will disease be minimised.

In an address delivered on the 5th inst., before the American Health Association, by Dr. NATHAN ALLEN, one, and the most prominent, view of this question is discussed as follows:—

"It is just to state here that the claims of the sick poor have been most liberally responded to by physicians, and that no other profession or class of men do so much for the poor as the medical profession. But this work of charity has its equivalents—it secures to the physician a stronger hold on the affection and confidence of the people, and, in different ways, tends to increase his business. But to engage actively in means to prevent disease, not simply in one instance, but in case of great numbers, this is very different—it cuts off directly the support of the physician. Such action is based upon a love of humanity—of philanthropy—a higher range of motive than that of giving services to the sick poor. It appeals to the very highest class of motives—not simply to save expense and relieve suffering, or improve health and prolong life, but to elevate mankind, and increase, physically, mentally, and morally, the sum of human happiness. Such are the legitimate fruits of sanitary science. Considering the powerful pecuniary interests of the profession, and the disinterested motives requisite to engage in sanitation work, it is rather surprising that so many members of the profession have from time to time engaged heartily in advancing sanitary science. The main object must have been the promotion of health, the diffusion of useful knowledge, and the enlightenment of mankind generally in respect to the laws of health and life. In some few instances, it might have been prompted by pecuniary considerations—the individual holding some official position, or seeking one. But these are exceptional cases."

In the main, there can be no "ulterior motive"—as the cynical phrase goes—in this policy of general enlightenment and the prevention of disease to which the medical profession, not only in this but in other countries, has committed itself. It is as though the lawyers should suddenly devote themselves to the propagation of useful knowledge, having for its object the putting an end to all difficulties in the transaction of business, and the general conduct of commercial and social and personal affairs, so as to render every man in a really practical sense his own lawyer. We are making the public the guardians of their own health, and showing them how to do without that advice the giving of which constitutes the bulk of our professional business. It is well to look this fact in the face. Why do we act thus suicidally? Is it that we are either wholly oblivious to our own interests, or so shortsighted as not to know what we are are doing? Neither of these propositions is the true one. It is in virtue of that complete change of front in the treatment of disease, not less than in its prevention, which has come over our scientific policy during the last half-century, and which each year is being strengthened, that this change in our relations with the public has been effected. We cannot either lay claim to exceptional virtue or confess to more than the ordinary amount of obtusity. There has never been any inscrutable mystery about the treatment of disease. Charlatans have tried to cloke their ignorance with pretence, but the true professors of the healing art have in all ages and countries rather erred on the side of loquacity as to their views and principles of procedure, than hidden or disguised them. Whilst it was believed that disease was something like an entity to combat and struggle against, using drugs and the appliances of art as weapons, this theory found ample expression in the works and utterances of the doctors. Now that it is felt that the re-establishment of health is the true method of procedure, that view is expounded with equal liberality; and as it goes without saying that if what will prevent or correct departures from the line of health-preservation must be better than cure, so by a perfectly natural process, without any exceptional philan-

thropy or shortsightedness on the part of the medical profession, physic comes to be a matter of sanitation. This we take to be the true explanation of "The Relation between Sanitary Science and the Medical Profession," which formed the subject of Dr. NATHAN ALLEN'S address of the Health Association.

The point to state plainly and to enforce with emphasis is the fact that the principles of the most advanced method of medical practice are the rectification of errors of function and the obviation of faults and errors in structure in such way as to restore that order of life on which health depends. The nomenclature of disease is regarded more as a means of intercommunication between medical men than as of value in itself. We treat the *patient* rather than the disease, and, in so far as the disease occupies us, it is in its character as a departure from the formula of physiological order rather than as a thing of itself. This is what the profession should bear in mind, and the public ought to understand.

WE drew attention in a recent issue to the *rationale* of the high altitude treatment of phthisis. We were able to point out that this method of treatment, however novel and opposed to medical tradition, is theoretically defensible on the lines of ascertained knowledge, and that its efficacy in phthisis is deducible from admitted principles of climatology. We propose now to consider briefly the varieties of phthisis to which it is applicable, and, as in our former article, we shall proceed deductively rather than inductively.

The three chief characteristics of the climate of high altitudes were shown to be purity of the air, aerial rarefaction, and cold. Purity of the air being equally essential in all types and stages of phthisis, we cannot derive from this factor any help in the selection of cases for the mountain treatment, but the due consideration of the remaining two is capable of affording valuable instruction and guidance. The atmospheric rarefaction throws a greatly increased strain upon the circulatory apparatus; hence, we conclude that valvular disease of the heart or feeble circulatory power is a strong contra-indication against the adoption of the high altitude treatment. For a similar reason this method of treatment is inapplicable to persons of advanced age, in whom the arteries are likely to have undergone more or less senile degeneration. The rarefaction of the air increases the number and depth of the respirations, and promotes the elimination of carbonic acid from the pulmonary epithelium. Hence it presses hardly upon those who do not possess a sufficient remnant of functionally competent lung to react to the increased strain thus thrown on the breathing apparatus. Cases, therefore, in which there is extensive destruction of lung tissue are unlikely to profit by the high altitude treatment.

It was long thought that hæmoptysis was a contra-indication to having recourse to the mountains—an idea founded no doubt on a mistaken analogy drawn from the experience of mountaineers, who not uncommonly suffer from epistaxis or melæna during their expeditions. Now, no fact in connexion with this question is better established than that hæmorrhage is rare at high altitudes, even in patients who suffered repeatedly from it while resident on the plains. A little reflection will show that there is no real discrepancy between these apparently divergent phenomena. The conditions of blood-pressure at the orifices of the body and in the lungs are not only not identical, but are actually reversed. Anæmia or congestion at the surface of the body implies an opposite condition of the viscera, and among them of the lungs; hence the fact that epistaxis occurs at high elevations, so far from warranting a dread of hæmoptysis, is rather a ground of security against its occurrence.

The prevalence of cold at high altitudes leads us to conclude that cases of phthisis complicated by renal or rheumatic affections are unlikely to benefit by this line of treatment. We infer, also, that sufficient constitutional vigour to resist the depressing influence of low temperatures is a *sine qud non* of a successful result; but it must be borne in mind that, while the shade temperature at Davos may be many degrees below, the thermometer in the sun often registers as much as 100° of heat. This sharp contrast between the sun and shade temperatures is one of the apparent drawbacks to the climate at high altitudes, but the risk of chill is to a very large extent obviated by the extreme dryness of the atmosphere.

The combination of cold, dryness, and rarefaction constitutes a climate of a highly stimulating type; hence we should expect to find that phthisical patients of the neurotic temperament would be unduly excited by it, while the torpid and phlegmatic might be expected to profit from such stimulation. Organic nervous disease, marked functional nervous excitement, especially hysteria, and persistent sleeplessness, are on similar grounds likely to prove strong contra-indications to the adoption of the high altitude treatment. The nature of the response of the organism to disease may afford us valuable guidance in this connexion. Where high temperature, rapid emaciation, and much prostration indicate profound constitutional disturbance, we may conclude that the mountain treatment is inapplicable, the probability being that it would tend to aggravate the inflammatory processes and precipitate the fatal issue, which is but too certain to ensue in such cases, whatever line of practice be adopted. On the other hand, cases of chronic and stationary phthisis, with slight constitutional disturbance, are likely to react favourably to the stimulating properties of the climate of high altitudes.

The foregoing conclusions, which are fairly deducible from a due consideration of the conditions of the case, are verified by practical experience. The cases that do best at high altitudes are those of simple phthisis in patients who are free from cardiac, renal, or rheumatic complications, and who exhibit a torpid reaction to the disease.

Many cases of respiratory disease, other than phthisis, benefit strikingly by the high altitude treatment, notably cases of delayed convalescence from pneumonia and fibroid pleurisy. Here the explanation is not far to seek. Such cases need before all things a stimulation of the vital powers to enable the affected organs to rid themselves of morbid deposits and resume their normal functional activity, and this stimulation is precisely the most essential physiological effect of the mountain climate. The only precaution necessary in such cases is to guard against a premature adoption of the high altitude treatment. In early convalescence, where there is still some lingering pyrexia with feeble digestive power, such a line of practice would run the

risk of promoting a recrudescence of disease, but at a somewhat later stage its value is alike theoretically evident and demonstrated by experience.

THE Farnham registration district has for years suffered from an exceptional prevalence of diphtheria, the death-rate from this disease being three or four times as great as that of the whole of England. Last year a thorough investigation was made for the Local Government Board into its sanitary circumstances, and the report of Mr. R. D. R. SWEETING, the inspector entrusted with this duty, is before us. It is unnecessary for our purpose to do more than to consider a portion of the area which is included in the sub-registration district of Frimley, for our attention has been directed solely to Frimley proper and to Camberley and York Town adjacent. When Mr. SWEETING visited this neighbourhood in 1885, he found no other provision for water-supply existing than wells scattered throughout it, and which varied in depth from ten to thirty-five feet; in Camberley and York Town a main drainage scheme had been recently completed, but in Frimley proper the excrement was mostly deposited in privy cesspits. Refuse was generally thrown on the ground or made into heaps, a few of the better houses alone being provided with ashpits. The pollution of the soil must have been matter of common occurrence, and the pollution of surface wells must have taken place as the result. Fatal throat affections have been prevalent alike in Frimley and in Camberley and York Town, registered mostly as croup and laryngitis. There can be but little doubt that some of these were of diphtheritic nature; indeed, in one family a death certified as due to cynanche tonsillaris was followed shortly afterwards by another death in the same family, the disease being then described as diphtheria. For the prevention of the extension of this malady, the authorities appear to have depended entirely upon the occasional closing of schools, and upon disinfection. No system of notification of infectious disease existed, and no hospital provision, either locally or elsewhere, was available for the isolation of such cases.

It might have been anticipated that the presentation of a report stating in detail the sanitary wants of the district would have roused the sanitary authority to take active steps to improve the conditions under which the inhabitants live, and to give facilities for the isolation of any persons suffering from disease which exposed the neighbourhood to danger. To state that they have neglected this obvious duty is no exaggeration. The only water-supply which is procurable by some five thousand people is that from surface wells, which at the best of times are liable to pollution; no hospital has been erected, and Frimley is still without any system of drainage. Even the arrangements for flushing the drainage of Camberley and York Town are defective, for no sufficient water-supply exists for this purpose. No wonder the inspector reported that "the rural sanitary authority does not appear to be alive to its important health functions, no steps of any moment having been taken to improve the hygienic condition of the large district committed to its charge, and no means adopted to check the serious epidemic of diphtheria which has ravaged it."

Recently the district has been again inspected by Mr. GEORGE TURNER on behalf of the Local Government Board, but while his report is in preparation Camberley and York Town are again smitten with diphtheria. In the course of about a fortnight persons to the number of seventy-six have been stricken with this disease, and thirteen deaths have taken place. This time the disease is not limited to the poor, but has invaded the houses of the more wealthy inhabitants of the district. There is great probability that the origin of the outbreak is in some way connected with a milk-supply. The acting medical officer of health has clearly indicated this; and it certainly appears to be the fact that most, if not all, of the cases had partaken of this particular supply, whilst others obtaining their milk from other sources, although living in the same neighbourhood, escaped. Assuming, however, that milk was the vehicle, the source and nature of the infection of that fluid has not yet been traced. The action of the sanitary authority is characteristic. They have limited their proceedings to considering certificates, on the one hand, that the water supplied to the farm and the milk it produced were of proper chemical constitution, and, on the other, that the health of the cows was satisfactory, and have apparently shut their eyes to the large physiological experiment which has been conducted in their midst. A notice has been issued recommending the boiling of milk, but this is all that has been done to prevent the consumption of an article of food which, it is likely enough, may still retain the power of inflicting loss of life. In the meantime the sanitary authority ask the help of the Local Government Board, as if it were the business of this Board to supply the wants created by local incapacity. That such help will be given we sincerely hope, for other reasons than those which relate to the rendering of assistance to an indolent local authority make it desirable that milk outbreaks should be investigated. The time for instituting such inquiry is perhaps opportune, for the inspector's visit to the district will bring to the knowledge of the Local Government Board the filthy condition of the Blackwater river, which runs through the district and forms the boundary of the farm from which the infected milk is said to have come. Men are now engaged in digging out the black sewage which comes from the Aldershot camp, and which checked the flow of water by its accumulation. It will be interesting to see whether the sanitary authority can be roused by this recent calamity to exercise its powers more efficiently than heretofore.

THE influence on the progeny of marriages of consanguinity will be always of interest to the philosopher, to the medical statistician, and to the public at large. Whether we agree with Dr. CLOUSTON that "there seems to be a special tendency for members of *neurotic* families to intermarry, and an affective affinity amongst such that tends towards love and marriage," or with Mr. GRANT ALLEN that "what we each fall in love with individually is our moral, mental, and physical complement: not our like, not our counterpart; quite the contrary; within healthy limits, our unlike and our opposite,"—the question of intermarriage remains a debatable subject. If we were to be led to an opinion by popular prejudice or by the influence of earlier writers in France or America, we should become very positive that the

intermarriage of relatives was an unmitigated wrong, and that nothing but evil could arise from consanguineous unions by virtue of the consanguinity.

In a paper read in the Psychological section of the British Medical Association at Brighton Dr. SHUTTLEWORTH renews an inquiry into this ever-interesting topic, and brings fresh statistics to bear on the subject. The tenour of his remarks is confirmatory in its general scope of the conclusions of others who, like himself, derived their information from the extensive field of observation provided by our idiot institutions, or from the scattered idiots who in Scotland have come under the observation of Dr. ARTHUR MITCHELL, C.B. The great difficulty in arriving at positively accurate results is the want of a uniform basis for comparison. We want to know how many healthy, self-relying men and women are the progeny of consanguineous unions in England, and it is a matter for great regret that this had not been furnished by the last census returns in accordance with the proposal of Sir JOHN LUBBOCK. Seeing that Mr. GEORGE DARWIN, by a somewhat elaborate inquiry based upon the number of "same-name" marriages, establishes as a basis of first-cousin marriages 1½ per cent. in London and 2¾ per cent. in rural districts for all classes of society, and Dr. ARTHUR MITCHELL makes his basis for Scotland 1·5 per cent., while Dr. LANGDON DOWN, on an investigation among the out-patients of the London Hospital, makes his basis ·5 per cent. only, it is obvious how greatly a more definite standard for comparison is needed.

In an investigation as to the number of imbecile children who are the products of consanguineous unions, Dr. SHUTTLEWORTH finds at the Royal Albert Asylum that 5·1 per cent. are the children of consanguineous marriages, and 2·9 per cent. of first-cousin marriages; Dr. GRABHAM found that at Earlswood 6 per cent. were the children of consanguineous unions, and 3·8 per cent. of first-cousin marriages; while Dr. LANGDON DOWN gives as his experience that, out of 852 cases of known parentage, 7 per cent. were the children of consanguineous marriages, and 5·4 per cent. were children of first cousins. Having regard to these figures alone, we can have no difficulty in agreeing with Dr. SHUTTLEWORTH that "*first-cousin* marriages (at any rate) are to some extent favourable to the production of idiot children," in spite of the arguments to the contrary based on Mr. GEO. DARWIN'S statistics. Dr. SHUTTLEWORTH, looking beyond the bald relation of numbers, and interrogating the life-history of the progenitors, corroborates in great measure what was remarked by Dr. LANGDON DOWN, that in the great bulk of the cases causes of idiocy could be discovered in addition to or independently of the consanguinity of parents. This is in harmony with the views published last year in America by Dr. CHARLES F. WITHINGTON, upholding the doctrine that morbid inheritance rather than specific degenerative tendency will account for all the infirmities met with in the offspring of cousins. It must, therefore, be that the great danger in the intermarriage of cousins lies in the circumstance that where there is a neurotic inheritance there are two certain morbid factors to contend with rather than a possible *one*. It is in this direction that the danger of consanguineous unions is to be sought. The experience of breeders of cattle teaches them that the greatest possible care is needed in the selection of animals where in-breeding is practised. Mr. GRANT ALLEN points out that "in narrow communities, where breeding in-and-in becomes almost inevitable, natural selection has to exert itself upon a crowd of cretins and other hapless incapables; but in wide and open champaign countries, where individual choice has free room for exercise, men and women as a rule marry for love, and marry on the whole their natural complements." On the whole, the balance of evidence would appear to be in favour of the conclusion that where a close scrutiny fails to discover any heritable weakness, neurotic or otherwise, consanguineous marriage *per se* is not necessarily a thing to be prohibited.

Is a large community the better for the existence within it of an efficient medical school? That it is so has been very eloquently maintained by the Archbishop of YORK and by Sir ANDREW CLARK at Sheffield. A church, a high-class school, a technical school, a public library, a university are unmistakable advantages. But a medical school? Might we not leave that to a few chief centres of intellectual activity—to the larger and metropolitan towns of each division of the kingdom? In these days of cheap and easy travelling why take medical teaching to the very door and home of students? When we find great metropolitan physicians and teachers like Sir ANDREW advocating the making of provincial schools great and effective, as he did last year at Dundee, and as he has just done again at Sheffield, we must believe that there is something to be said for the multiplication of provincial schools. The arguments deserve consideration. They resolve themselves mainly into two classes. Firstly, it was maintained that cultivated young men might be educated medically much cheaper at their own doors. This was the Master Cutler's great argument. Callings were wanted for young men, and they could be put into the medical profession more cheaply by the way of a good local school than by sending them to London. This is a fair argument, but not a very high one. Sir ANDREW CLARK maintained that a high-class school would be for the benefit of the community in which it was placed, and that the development of the various branches of medical knowledge and art was now so advanced that they could not be taught but in highly efficient and highly organised schools, and that it was out of all reason to expect medical men to provide and pay for these schools. We are disposed to agree with Sir ANDREW in the main. We cannot doubt that communities like Sheffield should have medical schools in which the science and art of medicine ought to be advanced by special opportunities of study and practice. English medical practice would be poorer if such lights as Leeds, Liverpool, Newcastle-on-Tyne, Manchester, and Birmingham were put out. Some provincial schools are in certain special branches inadequate. So are some of the schools in London and in other parts of the United Kingdom. There is wealth enough in all the above-named towns, as there is in London, to make the plant and apparatus of the schools complete. How is the money to be procured for these purposes? This is a question of some difficulty and delicacy. Clearly money, and teaching power, and apparatus may be wasted by too great a multiplication of schools. On the other hand, a certain amount of competition in schools is

highly advantageous. The hospitals in all our great manufacturing and industrial centres might easily be made efficient for clinical teaching—and good clinical teachers abound therein—but the great difficulty is to find well-trained anatomists, biologists, physiologists, pathologists, and chemists, who should be so well endowed as to be able to give sufficient time to teaching in a small school, and in providing them with suitable laboratories and material for the illustration of their lectures and for the practical work and instruction of their pupils. Unless this idea is held firmly in the foreground and practically insisted on, a proper medical curriculum can never be thoroughly carried out, and a medical school can only exist in name. The best schools in the provinces which have grasped the necessity of fully satisfying these requirements have increased in numbers. Leeds, Manchester, and even London are too near Sheffield for its existence as a centre of medical education, unless it puts itself in a position to compete with, or even surpass, these in the completeness of its scientific arrangements and work. Sheffield, like other places, wants some man like Mr. OWENS of Manchester, or JOSIAH MASON of Birmingham, to endow teachers and found laboratories for its medical schools. Our own great aristocratic and commercial leaders have only to reflect on the human importance of medical science to deal generously with hospitals and medical schools. The State itself might do more in assisting the costly and less immediately profitable parts of medical investigation and research. Finally, our examining authorities should be more severe in their estimate of what constitutes a medical school, and should withhold their recognition from institutions where teaching power or apparatus is deficient. In this way the number of our medical schools would be kept in check, whilst they would be fortified and improved in character. The Medical Council has committed itself to some inquiry into the efficiency of medical schools, of which we may expect to hear something at the approaching meeting fixed for Nov. 16th.

Annotations.

"Ne quid nimis."

THE GENERAL MEETING AT THE COLLEGE OF SURGEONS.

AT the general meeting of the Fellows and Members of the College of Surgeons, to be held in the College on Thursday next at 3.0 P.M., it is intended to move the following three resolutions—namely: 1. That in the opinion of this meeting, it would conduce to the welfare of the Royal College of Surgeons, and tend to promote the interests of medical polity and education, first, if Members of the College were empowered to take part (separately or conjointly with the Fellows) in the election of the Council; second, if Members of the College were eligible to sit in the Council, provided (*a*) that no Member of the College shall be entitled to vote till he have been such member for a period of ten years, (*b*) that no Member of the College shall be eligible to sit in the Council till he have been such member for a period of twenty years, and (*c*) that not more than one-fourth of the Council shall consist of Members of the College who are not also Fellows. 2. That, with a view to give effect to the recommendations in the foregoing resolution, the Council be hereby respectfully requested to empower certain members of its body to meet and confer with the representatives of the Association of Fellows and of the Association of Members, together with, if necessary, an equal number of Fellows and Members who may not belong to either of the Associations, to be selected in any manner satisfactory to the Council. 3. That, in the opinion of this meeting, the method recommended by the Council for widening the basis upon which the Fellowship is obtained tends to lower the academic status of that diploma, and in the interest of surgical education is not advisable.

We are requested to state that Fellows or Members desirous of proposing resolutions at the meeting on Nov. 4th should furnish copies thereof to the Secretary of the College of Surgeons two days before the meeting.

THE ENTERIC FEVER EPIDEMIC AT SWANSEA.

HAVING completed his investigations into the circumstances of this epidemic, Mr. Ebenezer Davies, the borough medical officer of health, has now issued a report on the subject. Since the commencement of the outbreak 112 attacks and seven deaths had taken place at the date of the report. Last year a similar epidemic occurred, and during a corresponding period 277 deaths took place. But in that case the disease was distributed somewhat generally over the town, whereas this year it is limited to only two of the several divisions of the borough, and it was this limited incidence that originally led to a suspicion that the water-supply was affected, and that the mischief had been brought about by the use of a water from a special reservoir which had only been used for the supply of the districts in question. Although the actual source of the specific infection of this special water has not been discovered, yet a spring flowing into the reservoir was open to contaminating matter from a farm or farm-houses on either side of it, and from privies and pigstyes; and chemical analysis has shown it to be greatly polluted and to contain forty times the amount of albuminoid ammonia that is contained in the water supplied to other portions of the borough. The medical officer of health asserts that he not only had no acquaintance with the existence of this contaminated spring, which is almost entirely hidden along its course, but he had been told, in answer to inquiries, that the reservoir implicated was solely supplied from another source. Mr. Davies was, however, by no means satisfied that the pollution of this water was the sole cause of the distribution of the disease, and hence examination was made of the local circumstances of some of the streets which were most severely affected. The results show unventilated sewers, and arrangements as to house-drains and closets which can only be effectually remedied by applying to them the same action as is now required under the modern bye-laws with respect to all new drains and closets. In short, we imagine that the house-drains and appliances are so contrived as to facilitate the entrance into dwellings of infected sewer air from unventilated sewers receiving enteric fever discharges. Fortunately remedies are being applied, and there is every reason to believe that the epidemic is rapidly abating.

THE BRADFORD FEVER HOSPITAL.

THE Bradford Town Council have determined to adopt the recommendation of their Sanitary Committee that application should be made for Parliamentary powers to enable them to take over the local Fever Hospital; but a correspondent, writing to a local newspaper, points out that some difficulty will be encountered in carrying out the proposal to acquire the hospital. This institution, it appears, was erected years ago by the charitable people of Bradford, and the committee who have the control of it have not been asked whether they approve the scheme of the Cor-

poration. It has for years served to afford accommodation for all classes of patients, but those sent to it by the sanitary authority constitute the greater number; consequently, it has occurred to the Corporation that, seeing they have no voice in its management, they might as well acquire the power they desire by taking possession of the whole institution. Another reason seems to have led to the same conclusion: the Corporation were desirous that the Hospital Committee should provide a special wing for small-pox, but their request was declined, and this has doubtless necessitated the town authority taking some steps to obtain accommodation for this disease. The main fault in the proceedings appears to be the complete forgetfulness of the fact that the committee, as trustees of the funds that have been collected, are bound to see that they are properly applied, and their consent to the proposed change should therefore have been obtained in the first instance. Nevertheless, we shall be glad to hear that the transference has been effected. The primary use of hospitals for infectious cases is the limitation of infectious disease. London particularly has suffered much from this fact being overlooked. Upon the management of such institutions is dependent the question whether good or harm shall come from their existence, and their control should therefore be entirely in the hands of the authority responsible for the safeguarding of the public health.

CHEMICO-BIOLOGY OF MICRO-ORGANISMS AND PTOMAINES.

PROFESSOR POEHL of St. Petersburgh, believing that ptomaines are usually due to the action of micro-organisms in decomposing the albuminoid constituents of the body, and knowing that they themselves are of the nature of reduction products, has made a number of observations on various micro-organisms for the purpose of determining their capacity for reduction, and thus estimating their power of producing ptomaines. The substance employed for the purpose of his investigations was Koch's nutritive gelatine, to which was added a minute quantity, 0·05 per cent., of perchloride of iron and ferro-cyanide of potassium. This admixture did not, he found, interfere at all with the development of the micro-organisms. The substance was placed in a test-tube with the usual precautions, and the inoculation made with a platinum needle thrust into it. In some of these cultures a distinct formation of prussian blue from the reduction due to the development of the micro-organisms was observed along the track of the needle within from twelve to twenty-four hours. In others the blue colour was later in making its appearance, while in some no blue was visible, even after the whole of the mass had become liquefied. It was remarkable that generally the blue colour was not formed in the track within from four to eight millimetres from the surface, thus showing that the oxygen of the air is prejudicial to the reduction process. After the track of the needle had become coloured, the blue appearance began gradually to spread around it in the substance of the gelatine, but even after a week an uncoloured superficial layer was always present of from four to eight millimetres in thickness. The chemical formation of prussian blue requires the presence of a slightly acid condition, and as some of the micro-organisms refuse to develop except in a slightly alkaline medium, the difficulty had to be overcome by waiting until the development had taken place in the slightly alkaline gelatine, and then adding nitric acid, when, if reduction had taken place, prussian blue was formed. Comma bacilli, typhus bacilli, streptococci, many of the micro-organisms of the fæces and the sputa, and of those existing in the Neva and waterworks water, set up a considerable degree of reduction, while some, including Bacillus subtilis, showed no signs of doing so even after a week had elapsed. In the case of cholera and other bacilli in alkaline media, Dr. Poehl observed that the addition of hydrochloric acid to the culture in process of development gave rise to a red pigment of the same tint as acetate of iron, in addition to the formation of prussian blue. A similar pigment was formed by itself in control experiments made with the same bacilli and nutrient gelatine containing no iron or ferro-cyanide, and is probably, according to Dr. Poehl, identical with the scatol derivative found by Brieger in pathological urines. The bacilli of Prior and Finckler found in cholera nostras appear to require much less oxygen for development than the comma bacilli, which are in a high degree aerobic. It would seem that in true cholera oxidising medicines, as peroxide of hydrogen and peroxide of manganese enclosed in keratin, so as to act specially on the small intestine, might be expected to act both in destroying ptomaines and in preventing their formation. Dr. Poehl thinks that much practical information is to be obtained by chemico-biological investigations on comma bacilli and pathological micro-organisms generally.

THE EASTERN HOSPITAL.

DR. COLLIE'S annual report for the year 1885 gives an interesting account of the work of the hospital during that period. Altogether 1038 patients were under treatment, 843 of whom were admitted during the year. Of these, scarlet fever contributed 614 cases, and enteric fever 112 cases, the mortality per cent. of these diseases being 12 for the former and 19 for the latter; typhus fever had a mortality of 46 per cent. In the small-pox wards 618 patients were admitted, of whom 425 were vaccinated; in 91 the vaccination was doubtful, and 102 were confessedly unvaccinated, the general mortality per cent. being 22·6 for this disease. Dr. Collie observes that the number of admissions of cases of enteric fever was less than in any year since the opening of the hospital in 1871. It is interesting to note that two nurses contracted enteric fever. It will be recollected that Dr. Collie some years ago contributed a series of valuable papers on the communicability of this disease, and argued against the belief that any insanitary condition of the hospital was responsible for the infection of the nurses which from time to time took place. Since these papers were published, the drainage and sanitary arrangements have been entirely reconstructed under the supervision of Mr. Keith Young, and may now be considered to be as perfect as they can be made. That the nurses have still continued to suffer from enteric fever is strong evidence of the correctness of Dr. Collie's view, that the youth of the nurses employed in the institution is an important element in rendering them susceptible to this disease.

NO MEDICAL EVIDENCE.

ON September 28th an inquest was held by Mr. F. S. Hawthorn, deputy coroner, on the body of George Ridley, aged thirty-seven. Deceased was found in an insensible condition on the Midland Railway with a scalp wound in the right occipital region and a small compound depressed fracture of the skull. He was removed to the Burton-on-Trent Infirmary, where trephining was performed. Death ensued, however, without deceased having recovered consciousness. No medical evidence was called. The jury returned a verdict of "Accidental death while trespassing on the railway." We entirely demur to the course taken in the investigation of the above-mentioned case, and to the verdict which followed the evidence. It seems to us a matter of doubt whether the death was accidental, suicidal, or homicidal. Except for the fact that the man was in a place of danger to life and limb there was nothing to show how the

injuries were received, for "the railway officials had been unable to trace the train by which the deceased was struck." A careful search ought certainly to have decided the latter question. The means by which any further light could reasonably be expected to be thrown on the matter—viz., a post-mortem examination—was not employed. We are decidedly of opinion that wherever the cause of death is equivocal, and especially where the liberty of another person may be imperilled by suspicion of foul play, it is the bounden duty of the authorities to secure the best attainable evidence, and this can only be got in cases like the one under consideration by a carefully conducted necropsy.

THE VENOM OF POISONOUS SNAKES.

THE investigation of the poison which in the form of snake-bites kills nearly 50,000 human beings per annum in India alone, cannot fail to present many points of interest, and has just been undertaken by Dr. R. Norris Wolfenden, whose results are published in the last part of the *Journal of Physiology*. The poisons with which he experimented were obtained from the Indian cobra, the scientific name of which is Naja tripudians, and the Indian viper, named the Daboia Russellii. In the report of the last Snake Commission, Dr. Wolfenden tells us, Mr. Pedler, one of the commissioners, sums up the results of his chemical examination into the nature of the poison with the remark that it is quite impossible to draw any deductions as to its nature, and he thought it was more than possible that the poison was a mixture of albuminous principles with some specific poison. Sir Joseph Fayrer and Dr. Lauder Brunton compared the action of cobra poison to the alkaloid conia. Blyth thought that the poison could be separated from the proteids in the venom, and that it was not thrown down with the albumens on the addition of alcohol. Walls, however, with whom Dr. Wolfenden agrees, ascertained that this is an error, and attributable to the circumstance that the alcohol used was not sufficiently pure. If to a solution of cobra poison absolute alcohol be added, a white precipitate is thrown down. After the precipitate has been thoroughly washed with alcohol, it can be redissolved in water, and the solution produces all the effects of cobra poison. Moreover if dried cobra poison in a state of fine powder be added to absolute alcohol, and the mixture be frequently agitated, the alcohol will derive no poisonous property from the cobra venom; but if rectified spirit be employed, the water in the rectified spirit is capable of taking up a certain amount of the poison. This is just what might be expected of an albuminous fluid, and tells in favour of the view that the cobra venom is of a proteid nature. The observations and experiments of Weir Mitchell and Reichert upon the venoms of several American snakes tend to prove that the poisonous principle is resident in the proteid constituents. Dr. Wolfenden finds the venom is generally acid when quite fresh, but that it may become neutral when it has been kept for a few hours. Experiment showed that dialysates of the venom, free from proteid, were quite harmless; but that if they contained any proteid they became toxic. The activity of the venom, though reduced, is not entirely abolished by the exposure to a boiling temperature. It is rendered innocuous by the permanganate of potash outside the body, as well as by tannic acid, metallic salts, and other agents which precipitate albumen. The albumens which Dr. Wolfenden finds are present in the venom of the cobra are: First, a globulin, which is always present, and probably kills by interference with the respiratory mechanism—that is, by asphyxia, and without paralysis, causing local inflammation, but not of great intensity. Secondly, an albumen resembling acid albumen, which is precipitated, together with globulin, by saturation, and which is in some degree dialysable; this proteid probably acts on the respiratory apparatus chiefly like the globulin, but less intensely. Thirdly, an albumen which is precipitated sodium sulphate out of the magnesia filtrate, and appears to be serum-albumen; this is also toxic, and produces a kind of ascending paralysis, with fatal termination by suppression of the respiratory function due to paralysis of the respiratory muscles. Lastly, he found some traces of hemi-albumose and of peptone. Similar compounds were found in the venom of daboia.

THE RIVER LEA.

DR. TRIPE, the medical officer of health of Hackney, is wisely exercising watchfulness over the river Lea. Public interest in any subject cannot be maintained for any length of time, and officers are often powerless to procure remedies for great evils except when popular feeling is aroused. We make no excuse, therefore, for again directing attention to the condition of this river, and to Dr. Tripe's statement that it has "gone back almost to its former state." Up to the end of September the Tottenham Local Board had been permitted by the Metropolitan Board of Works to discharge the Tottenham sewage through a new sewer into the metropolitan system, but this privilege has now ceased, and we learn from a report which Dr. Tripe has presented to his authority that he found a scum on the water near the Tottenham outfall, and many dead fish. Within fifty yards from this outfall there was as much ammonia and organic matter in the water as to equal a mixture of one-third of sewage and two-thirds of distilled water, and on one particular day the effluent contained as much of these constituents as did sewage taken from the sewer in Mare-street, Hackney, and it smelt worse. A member of the Hackney vestry, who is also a member of the Metropolitan Board of Works, expressed the opinion that further assistance from the latter Board could not be expected, and that the only remedy was in the hands of the Tottenham authority, who must deal more effectually with their sewage before discharging it into the Lea. Finally, Dr. Tripe's recommendation was adopted, that the attention of the Tottenham Local Board and the Lea Conservancy Board be called to the unsatisfactory condition of the Lea, since the effluent has again been discharged into that river.

INTRA-CRANIAL HÆMORRHAGE.

AT a meeting of the Pathological Society of Philadelphia, Dr. H. A. Formad read a paper upon Intra-cranial Hæmorrhage (*Boston Medical and Surgical Journal*, Sept. 30th), based upon an analysis of 143 cases occurring in medico-legal practice. He divided them into eight classes, and arrived at the following practical conclusions:—1. Hæmorrhages exclusively above the pia mater and above the dura mater—that is, on the outside of the brain—are always due to *traumatism* or to *sunstroke*, provided a cerebral source for hæmorrhage be excluded, and the cerebral vessels and membranes be not diseased. 2. Hæmorrhage in the floor of the fourth ventricle is always traumatic, provided there be no blood clots in the lateral ventricles or any other part of the cerebral substance. 3. Hæmorrhage exclusively below the pia mater, or in any part of the brain substance, or in the ventricles (except the fourth), is always idiopathic—that is, due to disease. 5. There must be a diseased condition of the cerebral vessels or substance for hæmorrhage to be a result of disease. There must be traumatism (a fall or violence) to account for a hæmorrhage in a normal brain. 5. The blood clot in concussion of the brain is not found at the point of application of violence, but always somewhere about the opposite side of the brain, and always within the arachnoid—that is, between the pia and dura mater. 6. The blood clot in fracture

of the skull is always found at the point of application of violence immediately below and always between the dura mater and the fractured part of the skull itself. 7. A blood clot found within the cranial vault is more favourable to the patient if due to fractured skull than if due to a mere concussion. 8. Only clotted blood and infiltration of blood corpuscles into tissues indicate an ante-mortem hæmorrhage. Liquid blood is due to post-mortem oozing, and stains, but does not infiltrate, tissues. 9. Severe bruises and cuts of the scalp may be seen in cases of idiopathic apoplexy, when a sudden cerebral hæmorrhage causes a person to fall. 10. In some cases it is impossible to decide by medical examination alone as to whether a head injury and the resulting hæmorrhage is due to a fall or violence. 11. External marks of violence may be invisible to the unaided eye in some cases of injury to the head or other parts, but are easily detected and distinguished from post-mortem spots by means of the microscope. 12. The bulk of an intracranial hæmorrhage stands usually in inverse proportion to that of the external scalp hæmorrhage.

HYDROPHOBIA IN CALIFORNIA.

THE San Francisco *News Letter* is publishing the replies which have been received from members of the medical profession in regard to the non-appearance of rabies in California or on the Pacific Coast. The two questions to which answers were solicited were as follows: (1) Has any case of rabies, either in man or animal, come under your personal notice, in this State or on this coast? If so, please give particulars. (2) Have you any theory as to the cause of the absence of this disease from our midst, and have you any facts to sustain your theory? The replies appear to prove pretty conclusively the non-existence of the disease in the district respecting which inquiry is made. One correspondent during a residence of twenty-nine years has seen but one case; the others unanimously answer the first query in the negative. With regard to the second question there is not such a similarity of opinion. One attributes California's immunity to its climate, while another gives as his opinion that the absence of rabies does not seem to be accounted for on the basis of climatic conditions. One alludes vaguely to the intervention between the east and the west of vast arid plains, lofty ranges of mountains, and great rivers, which he surmises present insuperable obstacles to infection by the direct transportation of infected animals; whilst another gravely states that the only theory that presents itself to him "is that, however hot the days may be in California, the nights are always cooler." Whatever may be the cause, however, California is to be congratulated on the effect, and will, we hope, continue to remain free from the scourge which has within the last few months so severely afflicted our own country.

DEATH FROM EATING HAW-BERRIES.

AN inquest was held by Mr. E. A. Carttar on Oct. 16th touching the death of Emma Ponton, aged seven years. Deceased had eaten a quantity of haws—the fruit of the whitethorn (*Cratægus oxyacantha*). On the following day she became very ill and vomited. A medical man was called in, but despite his efforts the girl died two days later. Dr. M'Mahon attributed the death to "suffocation arising from inflammation of the stomach and bowels caused by excessive nervous irritation, brought on by the swallowing of the seeds of berries which were not poisonous." As the coroner observed, it was a remarkable death. Apart from the suffocation induced as alleged, however, we can quite understand that the haws may have caused death. In the first place they are astringent and somewhat acrid, and are not unlikely, when eaten in quantity, to set up vomiting and gastro-intestinal irritation. Further, the dense outer skin and the "stones" may excite digestive disturbances by their mechanical action. Accumulations of such bodies may lead to fæcal impaction, or a single stone may readily be lodged in the vermiform appendix, and lead to ulcerative perforation, with retro-peritoneal abscess and peritonitis as sequelæ. From the evidence it does not seem certain that deceased may not have swallowed other "berries" of a poisonous nature in mistake for haws—e.g., the fruit of the bryony plant, which when ripe is found in scarlet clusters, one of the most beautiful ornaments of our hedgerows; or of the woody nightshade (*Solanum dulcamara*). The unfortunate event shows the necessity for instruction to the young of the danger that lurks in the ingestion of wild "berries," whether reputed to be poisonous or harmless.

METROPOLITAN ASYLUMS BOARD.

AT the fortnightly meeting of the Managers of the Metropoltan Asylums District, which was held on Saturday last, the Board considered a letter from the Local Government Board asking what steps were being taken to remedy the defective drainage of the Western Hospital, and it was decided to refer back to the committee of the hospital their report recommending that a firm of architects be employed to carry out the work, and that the committee be empowered to consult a sanitary engineer if they considered it necessary to do so. The returns of those under treatment showed a total of 622 patients, of whom 520 were suffering from scarlet fever, 99 from enteric fever, and 3 from small-pox. Scarlet fever and enteric fever showed a slight tendency to increase, but the metropolis continued almost free from small-pox. The committee for the Western Hospital reported that they were of opinion that the practice of disinfecting the Board's ambulances at the hospital should be discontinued, while the Northern Hospital committee reported in an opposite sense. The arrangements for the lighting of the hospital ships by electricity are now completed.

THE BIARRITZ CONGRESS ON CLIMATOLOGY.

MORE than a thousand adherents were secured by the organisers of the above Congress. Several Governments sent representatives, and the presence during the month of October of so many distinguished guests at Biarritz, helped to enliven this fashionable watering-place. There are few seaside resorts in France better situated than Biarritz, and under the Third Empire it was often frequented by the Court and the highest functionaries of the State. In the intermediary seasons, during the late autumn and the early spring, Biarritz is an invigorating "half-way house" between the north and the south. It does not, therefore, compete with the Riviera, but helps rather to supplement the climatic advantages found on the shores of the Mediterranean. Indeed, a whiff from the Atlantic is always welcome to patients from the north, and this can be safely enjoyed at Biarritz at a season when it might prove fatal nearer to England. As if in acknowledgment of the alliance between Biarritz and the Riviera, Dr. Colignon, chief physician of the Hôtel Dieu at Monaco, was elected by the Congress secretary for the principal section—namely, that dealing with scientific and medical climatology. Effectively the principality of Monaco occupies the most enviable site on the Riviera. The shelter enjoyed from the northern winds is not surpassed anywhere. Further, a certain portion of the principality—that stretching towards the Eastern frontier, and known as the Quartier des Moulins, where the lemon trees blossom all the year round—is not only marvellously sheltered, but does not suffer from stagnant atmosphere. Situated on the ledge of a high mountain, dominating the sea,

it is sufficiently elevated to enjoy a constant breeze without losing its advantages of temperature. Dr. Colignon doubtless made a good point of these qualifications, and we are informed that his statistics concerning the cures effected at the Monaco Hospital were considered very conclusive by the Congress. Full reports of the proceedings have not yet been published, but we can nevertheless congratulate the town of Biarritz on the initiative it has taken. The climatic treatment of disease is yearly becoming more general, and all efforts to collect and scientifically compare the results attained will render this mode of dealing with a numerous class of patients easier to follow, without incurring the dangers that spring from insufficient knowledge of local peculiarities.

PURPURA HÆMORRHAGICA IN ST. PETERSBURG AND HAMBURG.

DR. E. MASING compares (*St. Petersburger Medicinische Wochenschrift*, Nos. 39 and 40) a case of purpura hæmorrhagica of his own, together with 13 cases culled from the case-books of the Mary Magdalen Hospital in St. Petersburg, with the 73 cases collected by Dr. Scheby-Buch, from the records of the Hamburg General Hospital. Of the 14 Russian cases, 10 were complicated with pyrexia and 8 with diarrhœa. Eight presented painful and swollen joints and muscles, whereas in the 73 Hamburg cases only 27 are reported as having had rheumatic symptoms. Hæmorrhage from the nasal and other cavities of the body occurred in 6 cases—i.e., in about the same proportion as in Hamburg. Urticaria was not observed at all, though it was frequently present in the Hamburg series. Youth is the most common time for the disease to occur, 9 cases being under twenty-five years of age. The disease would appear to be even more rare in St. Petersburg than in Hamburg, for there were only 13 cases found in the Mary Magdalen Hospital Reports for the last twenty years, during which time the total number of patients was over 82,000; while the 73 Hamburg Hospital cases occurred in the space of forty-one years out of a total of 100,000 patients. The mortality was greater than in Hamburg, 4 out of 14 being fatal in St. Petersburg and only 10 out of 73 in Hamburg. One of the former series, however, died of phthisis. The author is quite unable to throw any light on the etiology of hæmorrhagic purpura, but he expresses the hope that bacteriological research may help to clear it up.

ERGOTISM IN COWS.

SOME discussion has been taking place lately with regard to ergoted grasses producing abortion in cows, and the question does not yet appear to be answered as to whether and to what extent the accident is due to the Claviceps purpurea, which in some seasons is a very common parasite on the herbage of pastures. By some authorities it is believed that ergot is the cause of the widespread epizootics of abortion which are sometimes reported as occurring among cattle, and which cause heavy loss to stock-breeders. By others this effect of ergot is doubted, and these doubts would appear to be justified by very conclusive evidence of an experimental kind. It has been given in large and repeated doses to cows, bitches, cats, swine, and rabbits in all stages of pregnancy, but its ecbolic action has not been observed in them, and the conclusion arrived at was that amongst the lower animals ergot, whether given by the mouth or rectum, in single large doses, or for some time continuously, has no tendency to expel the contents of the uterus at any period of gestation. Abortion in cattle is undoubtedly due to many causes. When sporadic, it may follow injury or disease; but when it occurs in a herd of pregnant cows, all or nearly all aborting after the first case, then the occurrence looks mysterious, and is popularly believed to be owing to "sympathy" among the cows, a kind of imitative action brought about by the animals' imagination. This notion has, of course, no foundation in fact, and multiple cases of abortion can be truthfully accounted for by infection conveyed from one cow which has aborted to others which are in calf. Veterinary surgeons had long, from observation, come to the conclusion that septic infection, possibly through the genital organs, was the principal if not the sole cause; and some years ago Franck, of the Munich Veterinary School, made some interesting experiments on pregnant cows, which demonstrated that abortion could readily be brought about by introducing a very small quantity of matter obtained from the vagina or afterbirth of a cow that had slipped its calf into the vagina of a pregnant one. This matter was found on examination to teem with micrococci. In order to prevent outbreaks of abortion, viewing it as an infectious disease, cattle-breeders should be thoroughly aware of the premonitory signs, which are usually well marked, and at once separate the animal which shows them from its fellows. When the accident has happened in a cowshed, then measures of a sanitary kind should be speedily adopted, as if dealing with a most infectious malady. By acting in this way, the heavy losses which are so frequently reported as the sequel of "warping" would be no longer heard of.

THE SUCCI FAST.

THE "fast of Succi" is commented on with unsparing sarcasm by M. Loye in the pages of our contemporary, *Le Progrès Médical* (Oct. 16th). He has been surprised to see that the physicians who had the control of the "experiment" allowing Succi to receive visits, to take rides, baths, &c., and, in fact, to have a measure of freedom which would have discredited the researches of Chossat and Voit, or Bidder and Schmidt, had they allowed it to the animals on whom they studied the effects of inanition. The whole affair seems to him to be a juggling trick, aimed to mystify *messieurs les savants*. But what, he asks, was the object in view? Was it to demonstrate the absolute possibility of living without nourishment—to do work without any source of force? That would have been a new search after perpetual motion, and he would not insult his readers by discussing it. Was it to show that certain individuals can do without food for some days? That is a common physiological fact, of which there are numerous instances, from the germinating grain to the hibernating marmot. Was it due to the faculty of simulation, which has too often upset the most clever *savants?* M. Loye hints even that such suspicion may reasonably attach to the Italian fasting man, who had formerly suffered from mental alienation. The results of the fast confirm these latter suspicions, for, apart from loss of weight and diminution in urea, he showed no symptoms of inanition; there was no loss of muscular energy; the respiratory movements and cardiac pulsations were as frequent as at the commencement. The physicians in charge do not appear to have measured the work done—a grave omission, which if supplied would have enabled one to determine whether or not there had been any introduction of food. The experiment thereby loses all scientific value. He only lost in weight 441 grammes per diem, and can it (the writer asks) be seriously maintained that this amount could suffice to maintain life and produce so much work? Bidder and Schmidt's animals lost $\frac{1}{17}$th of their weight daily with hardly any work; Succi only lost $\frac{1}{170}$th of his body weight, and yet took long walks, swam, conversed, and performed all manner of work. Finally, M. Loye discredits the famous liquor which Succi took to assuage his hunger, for the sensation is central, and not to be masked by anæsthesia of the stomach. He

regrets that his Italian *confrères* should have accepted the office of detecting a trick, which is the business of conjurors and not of doctors; and he concludes by trusting, for the honour of French science, that the further challenge be not accepted.

THE SCOTCH AND IRISH ELECTIONS.

WE think the merits of the Scotch candidates are now well understood. Dr. Morton's personal qualifications are unexceptionable, but no ingenuity will get rid of the argument that he is disqualified to represent the free practitioners of Scotland by the mere fact that he is the President of one of its corporations, already strongly represented in the Council. It is an open secret that several distinguished physicians—notably, Sir Douglas Maclagan and Professor Gairdner—have been mentioned as gentlemen who would have had a large support as honoured members of the profession in Scotland. It is understood, too, that either of these gentlemen would have regarded it as an honour to be elected direct representative for the northern division of the kingdom. But they judged that, strictly speaking, the seat was meant for men representing the rank and file of the profession, and so judging, they decided not to complicate the election by allowing their names to be put forward. We venture to say that by this decision they have done great honour both to themselves and the general practitioners of Scotland, who are now free to elect one of their own number. Two such gentlemen are before the constituency, and we look confidently forward to the election of one of them. Dr. Sinclair of Dundee or Dr. Bruce of Dingwall would worthily represent the practitioners of Scotland. It speaks well for the public spirit of this section of the profession that men in busy practice can be procured ready to make the necessary sacrifice of time and convenience. The case of Ireland is to be regarded with more anxiety. Dublin threatens to seize the new seat as she has appropriated all the rest since there was a Council, and general practice in Ireland, which has so many wants of its own, appears likely to go as unrepresented as if direct representation had not been granted. Let us hope that even yet the official and consultant and Dublin candidates will leave the seat for those who sorely need it. But this "sublime repression" of themselves is not to be relied on too much, and, as in Scotland, the blame will ultimately rest on the general practitioners if they do not elect one of their own order.

PERNICIOUS ANÆMIA AND INTESTINAL PARASITES.

THAT the condition produced on the system by the ravages of the blood-sucking parasite, Anchylostomum duodenale, resembles in every particular the progressive anæmia which so often proves fatal, and is, so far as knowledge goes, at once idiopathic and pernicious, is now a well-established fact. It has remained, however, for the past few months to see statements made and proofs advanced that other intestinal parasites may be the means of inducing this grave anæmia. We lately cited the paper of Dr. Reni on the relation of Tricocephalus dispar to Beri-beri, which was intended to point to this connexion; and a paper was lately published by Dr. Reyher to prove that in some cases the cestoid worm, Bothriocephalus latus, is the cause of a "pernicious anæmia." (An abstract of this paper will be found in the *International Journal of the Medical Sciences* for October, p. 531.) Dr. Runeberg, of Helsingfors, read a paper at the Berlin Congress of Naturalists and Physicians in confirmation of Reyher's view. (*Berl. Klin. Wochensch.*, Oct. 4th.) He averred that under certain circumstances the presence of bothriocephali in the intestine might lead to true pernicious anæmia; he had observed this connexion in twelve out of nineteen cases, and was able to cure his patients by the free use of anthelmintics together with arsenic and iron. In the debate that ensued, Professor Biermer doubted if Dr. Runeberg's cases really came under that category, not presenting all its typical phenomena. He had never himself met with any such connexion with intestinal worms. Professors Quincke, Immermann, and Heller all spoke in the same sense, the last-named pointing out that bothriocephalus was a common parasite, and often met with in great abundance without inducing any general symptoms.

THE CHOLERA EPIDEMIC.

THE past week has exhibited a further decline in the extent to which cholera has prevailed in localities which have already been referred to as suffering from the epidemic. Trieste and Pesth are now the only two places from which regular daily returns are received. As regards Trieste, the daily mortality during the past week has varied from 4 to 1; and at Pesth it has varied from 18 to 10. But, quite apart from these towns, it is evident that cholera is still somewhat widely diffused over various parts of Austro-Hungary, and recent information is to the effect that in Croatia an average of 12 attacks and 6 deaths, and in Szegedin an average of 13 attacks and 7 deaths, still occur daily. Fresh occurrences of cholera are also reported from Raab, Theriosopol, and the village of Csebza in Southern Hungary. During the seven weeks ending Oct. 24th the cholera deaths in Pesth had amounted to 393, and it is estimated that the attacks had exceeded 1000.

"AEROBIC" AND "ANAEROBIC."

A SUGGESTIVE idea, which has not yet led to any definite results, has been taken up by M. Arloing, and concerns an attempt to learn more of the nature of infective diseases by the aid of chemical physiology. The aerobic microbe, it is believed, would live at the expense of the oxygen of the blood, and we should consequently expect that this would show itself in the form of alterations in the quantity and quality of the chemical substances discharged from the body. It has been found that the amount of carbonic acid discharged from the lungs in cases of charbon and gangrenous septicæmia diminishes during the whole course of the fever, and especially towards its termination. This diminution in the discharged carbonic acid appears to have begun soon after the inoculation of the poison in the case of charbon; whilst in the case of gangrenous septicæmia, for some hours after the inoculation the quantity of carbonic acid exhaled was increased. It is believed that this difference in the amounts of carbonic acid discharged during the hours immediately following inoculation is to be attributed to the difference between aerobic and anaerobic organisms.

THE ADVANCE OF TEMPERANCE.

MOST of our readers will be pleased to see that, under the action of healthy public discussion, temperance is becoming more and more a custom with our countrymen. Alcoholic drinks, which once were classed with daily bread in very many households, rich and poor alike, are now luxuries less common than tea, and have, indeed, in an ever-widening range of popular opinion, come to be no more than the stimulant accessories of impaired nutrition. They certainly should not, as a rule, be taken apart from food, and neglect of this precaution has probably much to do with the formation of the drinking habit. We have heard it suggested, in conformity with this view, that licensed houses should be required to supply food as well as intoxicant liquor, and it is possible that in that case the consumption of the latter would be less than it is. Every means of restraining drunkenness is helpful to the

cause of temperance, therefore we willingly note the suggestion. At the same time, it should be remembered that there is not for those whose health is good much help, if any, in alcohol, that it rather hinders than assists their energies, and that non-stimulant restoratives and food can best recruit them after toil; while thirst, the want of water, is best allayed by merely making good that want.

LIGATURE OF ARTERIES.

PROBABLY few subjects have afforded more occupation to the surgical mind than that of the ligature of arteries, and there seems a probability that it will continue to exercise the ingenuity of surgeons for many years to come. The discussion at the last meeting of the Clinical Society, though it did not elicit the opinions of many surgeons, yielded at least a great variety of opinions, for no two speakers appeared to agree in all particulars. The material of which the ligature should be composed, the kind of knot to be used, whether the arterial coats should be divided, whether two ligatures should be employed and the artery divided when deligation is practised in the continuity of an artery—are all moot points. Mr. Thomas Smith advocated the employment of the clove hitch, as being less liable to slip or to cause ulceration of the artery than the ordinary reef-knot, which has been in almost universal use of late years. The absence of any necessity for division of the internal coats of the artery seemed to be proved by the experimental researches of Messrs. Ballance and Edmunds. Kangaroo tendon does not yet seem to have established its reputation as a ligature to be relied upon in all cases.

THE INDISCRIMINATE SALE OF FIREARMS.

ON Thursday last Dr. Danford Thomas held an inquest on Edgar Wilkins Hanley, aged thirty-one, an artist, who shot himself on the previous Monday. Mr. Sylvanus Hanley, the father of the deceased, stated that for several years his son had been under medical care for a series of nervous disorders, and he had an idea that he would die an idiot. Last February he was strangely affected by the suicide of the late Lord Shaftesbury. He was attended by his landlady, and also an attendant. At four o'clock on Monday the deceased shot himself, a revolver being found afterwards by the bedside. Since Christmas last, a friend had intercepted letters from the deceased to various London gunsmiths asking to be furnished with firearms and ammunition. One gunsmith insisted on complying with the order, whereupon witness threatened to put the matter into the hands of Sir Charles Warren. A juryman remarked that greater care ought to be exercised in the sale of firearms to invalids. They should not be sent in this manner indiscriminately by post. The coroner said, "All the gunsmiths want is the money. They will evidently send revolvers by post to anyone." A verdict of "Suicide whilst of unsound mind" was returned. We must express our approbation of the remarks above quoted. Any infant, any lunatic at large, in fact any irresponsible person, can, as the law at present stands, furnish himself with a weapon by which he can in a moment deprive himself or others of life. Such a state of things surely ought to be remedied. We would suggest that no person should, under any circumstances, be allowed to purchase firearms of any description except on a personal application to the gunsmith, accompanied by a written statement concerning the purpose for which such weapons were required; and that, moreover, such statement should be accompanied by a guarantee from a householder, or some responsible person, that he believes the weapon in question is to be used solely and *bond fide* for the purpose stated. Within a few years back we can recall to memory cases of a boy who killed another with a pistol, of a girl playing with a friend's revolver who shot herself through the heart, of a man who shot a woman through the chest, of a nobleman who shot himself in a cab, and many similar cases. These facts speak for themselves, and the mere mention of them ought to be sufficient to awaken the minds of the authorities to the necessity for legislation on so important a subject.

PUBLIC HEALTH IN THE KINGDOM OF HAWAII.

FEW things are more significant of the progress which is going on all over the world than the establishment in countries not long removed from a state of barbarism of boards of health and of organisations for securing efficient sanitary administration, such as were all but unknown even in the most civilised communities during the past century. The kingdom of Hawaii is eminently a case in point, and we are glad to find that, as the result of the efforts going on there, a manifest decline in the death-rate is in progress, and that the Hawaiian people are gradually being awakened to an appreciation of the laws of health in many ways. The President of the Board of Health, in his report for 1885, the thirteenth year of the reign of his Majesty Kalakaua, speaks in the most hopeful terms of the future of the kingdom, and he expresses the conviction that a race so vigorous in its rude uncultivated state, so healthy and prolific in its aboriginal condition, will not be overcome by the vicious conditions connected with the radical change in habits of life and manners which is being brought about by the transition from a simple natural life to that of the more artificial one of civilisation. Great improvements are in progress as to the treatment and care of lepers. It has been deemed necessary to separate from others the children of lepers, although not yet attacked with the disease. But latterly it has been admitted that it is little short of an outrage that children, only suspected of being tainted on the ground of heredity and yet giving no sign of the disease, should be doomed to lose all their opportunities in life and to associate only with lepers. The result is that a special school for girls has been opened by the queen, and a hope is expressed that a similar institution may be erected and opened by the king for the boys. The water-supply for some principal towns has been largely improved; the question of hospital construction generally is being considered; and it is urged that means of isolation in cheerful breezy spots should be provided for infectious diseases, and that the question of drainage should be attended to. As to the importation of infection, a form of quarantine detention is largely trusted to, and the accommodation available seems to be more complete than that existing in some European communities where profession of trust in the same expedient has long existed; thus it was tested last year when 940 Japanese immigrants suffering from small-pox were landed; and no Chinese are allowed to come ashore except after a quarantine detention.

NEURITIS AND NEUROSES.

THE growing conception of "neuritis" as an entity and a frequent cause of disease is leading to the explanation of several functional derangements which hitherto have been classed under the wide but meaningless term of "neuroses." Dr. Max Meyer adduces evidence to show that even when "multiple neuritis" is exhausted to explain alcoholic and toxic paralyses, there remains the large group of peripheral neuralgiæ which may have their starting-point in a neuritis; and that motor spasms, tic douloureux, migraine, and even epileptic attacks may sometimes be referred to the same source. (*Berlin. Klin. Wochenschrift*, No. 43.) He illustrates his thesis by cases of sciatica, occipital neuralgia, migraine, epilepsy, and tic douloureux, in which there was distinct evi-

dence of neuritis; and we need hardly adduce the well-known fact of tender points in many neuralgiæ which bear this out. Granting this inflammatory origin, it points, he thinks, to therapeutic measures—in rigid antiphlogosis (i.e. leeching) at the outset, whereby may be avoided relapses or secondary degeneration of the affected nerve. If the acute stage have passed, he considered that the best measure for promoting absorption of the inflammatory condition is galvanism, with which may be combined massage; and that, lastly, nerve-stretching is of value in cases where there is old exudation in the nerve sheath and its vicinity in spots which are not accessible to galvanism.

PROFESSOR RUTHERFORD ON THE SENSE OF HEARING.

IN the introductory address at the Edinburgh University on the Sense of Hearing, Professor Rutherford discussed at considerable length the theory of sound sensation which was advanced by Helmholtz, and the theory of the cause of concord between tones of the same pitch. According to Helmholtz, a compound vibration is analysed in the cochlea. If the blending of each sensation in a compound sound eventually takes place in the centre of perception, why, Professor Rutherford asks, is there any need to have the complex vibration analysed in the cochlea? Those of our readers who are interested in this matter we must refer to Professor Rutherford's suggestive address.

VISCERAL TABES.

IF one were asked the meaning of "visceral tabes," the reply would probably be given, without suspicion of being wrong, to the effect that the term implied a wasting of the internal organs of the body. But, alas, visceral tabes has no such meaning. The origin of the designation may be thus sketched: locomotor ataxy is called tabes dorsalis, and sometimes plain "tabes"; visceral crises are remarkable symptoms of tabes dorsalis; a case of locomotor ataxy in which the chief features are the occurrence of visceral crises, is termed visceral tabes. Bronchorrhœa, gastrorrhœa, and entorrhœa are the visceral symptoms most marked in a case of "visceral tabes," recorded in No. 117 of *La France Médicale* by M. Seglas. In addition to the "runnings" from the bronchi, stomach, and intestines, the patient was the victim of profuse perspirations and copious discharges of urine. The patient is a female, aged fifty, whose father died from disease of the spinal cord, and whose two sisters and one brother also succumbed to paralysis. The knee-jerk is lost only on the right side. The ataxy of gait is not marked, but there is inability to walk well in the dark.

PERLECHE: AN AFFECTION OF SCHOOL CHILDREN.

AN affection which is common among school children in parts of France, and which is known by the names of *perlèche* and *bridou*, has recently been investigated by Dr. Justin Lemaistre, professor in the Limoges School of Medicine, and found to be of parasitic origin. The parts affected are the angles of the mouth and the skin immediately adjacent to them. The epithelium first becomes whitish, sodden, and easily detached; the skin then becomes involved, but as a rule only the superficial layers of the epidermis peel off, the corium not being quite denuded. Sometimes small fissures make their appearance, radiating from the angle of the mouth, which occasion some pain and bleed slightly when the mouth is widely opened. The appearance is not unlike that of the mucous patches and rhagades seen in the same situation in syphilitic children. The average duration of the affection is not more than a fortnight, but children are often affected several times a year, so that no protection is afforded against subsequent attacks. Of course it is only of a slight nature at any time. M. Lemaistre finds that it is contracted through the vessels from which the children drink. He examined the epithelium and found a new microbe belonging to the sphero-bacteria or cocci of the Schizomycetes group. Cultivations in bouillon produced a mass which gave the appearance of an immense number of chains intertwined; consequently M. Lemaistre proposes the name Streptococcus plicatilis. He succeeded also in cultivating the same from the water of a fountain. The wooden drinking bowl in use amongst the poor plays, he thinks, an important part in the etiology of the disease. He explains the situation of the affection by supposing that the Streptococcus plicatilis is anærobic, and that it finds in the commissures of the lips suitable moisture and sufficient protection. Fortunately it does not multiply very rapidly, and consequently the affection it produces is not of a serious nature. Of the 5500 children in the thirty-two primary schools in Limoges, 312, or one in every 17, are affected with perlèche. The best treatment is by means of copper and alum applications, boracic acid appearing not to be efficacious. The prophylaxis consists in cleaning the drinking vessels and fountains. Though no attempts at inoculation seem to have been made, the researches of M. Lemaistre leave but little doubt of the parasitic nature of this essentially school affection, which very probably is common enough, and may usefully be looked for by rural practitioners in this country as well as in France.

THE CARDIAC GANGLIA.

DR. LUDWIG EISENLOHR, assistant at the Munich Pathological Institute, has recently described the nerves and ganglia of the human heart (Abstr. in *Münchener Med. Woch.*, No. 39). He describes ganglia cells occurring isolated and in groups, mainly in the auricular wall, more rarely in the auriculo-ventricular groove. They lie embedded in the subpericardial connective and adipose tissue. In the muscle the medullated nerve fibres lack ganglia cells. The sheath of the nerve fibres, on or between which the cells and ganglia lie, is prolonged over the surface of the latter. Isolated cells show the following structure: A central protoplasmic cell body with vesicular nucleus and nucleoli, mostly excentric, invested by a capsule of nucleated connective tissue. From the cell proceeds a process which cannot usually be traced. Certain ganglia cells give rise to medullated fibres; bi-nucleated cells are often met with, and most of the cells contain pigment. In every ganglion occur twisted and looped fibres, which unite to form the nerve trunk leaving the ganglion, and break up into smaller trunks. Some fibres do not enter the ganglia, but join the others in their course. No positive conclusions could be arrived at as to the nerve endings in the muscle cells.

LEAD-POISONING AND HOME-MADE WINES.

THE *Wiltshire Telegraph* of October 23rd contains the report of a very important and instructive investigation by Dr. Campbell, Medical Officer of Health for Calne, into the cause of a certain outbreak of cases of lead-poisoning in the months of August, September, and October, which had puzzled him for a long time. The cases occurred chiefly, almost entirely, in men, and coincided roughly with harvest work. Examinations of drinking-water, beer, tea, coffee, bread, and various cooking utensils gave no light. The occurrence of seven acute cases about three weeks since, two almost fatal, led to the discovery of the real source of mischief. The wife of one of the men explained that her husband had drunk some home-made rhubarb wine. She was sure "it could not contain poison of any sort, as she was very careful in selecting and cleaning her rhubarb, and as for the

sugar and barm, they were all right. *Besides, the vessel was a beautifully clean glazed earthenware pan*, in which she steeped it for a fortnight or three weeks to ferment." Here was the source of the poison, as Dr. Campbell says: "As is well known, this glaze contains 60 per cent. of white or red lead, and during the process of fermentation the acids of the fruit used, with the acetic acid or vinegar generated, act on the glaze and dissolve the lead, forming acetate or sugar of lead, a powerful irritant poison even in small quantities." Not only rhubarb, but red and black currants, sloes, and damsons are so used, and some thrifty wives have been able to supply their husbands with gallons for use in the harvest time. Dr. Campbell says that the same vessels are used for making bread, and that in one case there were slight indications of lead-poisoning in a teetotaler apparently from eating the bread. He recommends the wine to be made in wooden vessels. Dr. Campbell's careful report should lead to much more care in the use of glazed vessels, in culinary operations, as many contain lead in easily soluble forms. His work is an admirable illustration of the uses of an officer of health.

CHAIR OF MATERIA MEDICA IN ABERDEEN UNIVERSITY.

AMONGST the candidates for the chair of Materia Medica in the University of Aberdeen is Dr. Alexander Napier, one of the editors of the *Glasgow Medical Journal*, and assistant to the chair of Materia Medica in the Glasgow University, Dr. Gibson of Edinburgh, and Dr. Macgregor Robertson of Glasgow, are also spoken of as probable applicants. The patronage of the chair is in the hands of the Secretary of State for Scotland.

CAUSATION OF PNEUMONIA.

MR. HENRY BAKER of Lansing, Mich., contributes a note to *Science* (Aug. 27th) in confutation of Dr. Siebert's conclusion that pneumonia most prevails in such atmospheric conditions as are marked by a low temperature and excessive humidity. Mr. Baker points out that the absolute humidity of the air varies with the temperature, and that when the air is coldest it is then absolutely driest. He showed at a late meeting of the American Climatological Association that pneumonia, in any given place, wherever studied, is quantitatively proportional to the coldness and dryness of the atmosphere. He rather ingeniously accounts for this by such a condition requiring a greater exhalation of watery vapour, whereby the non-volatile chloride of sodium is left behind in the air cells, its presence favouring the osmosis of fibrine elements from the blood into the pulmonary parenchyma. Thus would be explained the known excess of this salt in the pneumonic lung, and its diminution in or disappearance from the urine.

SPONTANEOUS SHEDDING OF NAILS IN HYSTERIA.

DR. T. FALCONE of Naples records a case of hysteria, prolonged and aggravated, in the course of which there was spontaneous shedding of the finger- and toe-nails (*Deutsch. Med. Woch.*, Oct. 14th). The patient was fifty years of age and since 1870 had, after a mental shock, been subject to hemicrania and other nerve symptoms, including paraplegia, hyperæsthesia, globus, &c. She recovered, but after remaining well for six years the symptoms returned on the occasion of her first visit to the grave of her son, whose death had in the first instance been the exciting cause of her attacks. The affection of the nails was preceded by tingling in the fingers and toes, especially the thumbs and great toes, followed by suppuration in the bed of the nail. It was noted that on the right thumb the new nail was formed directly from the bed of the nail by proliferation of epithelium, which assumed a horny character; but on all the other affected fingers and toes the repair took place in the usual way—viz., by growth from the matrix. The condition altogether was regarded as a dystrophic one due to disordered nerve function.

OPENING OF THE SESSION AT BRUSSELS.

THE public opening of the winter session in the University of Brussels seems to have been attended with more disturbance on the part of the students than is usually the case with this ceremony, the differences amongst the professorial staff during the past academical year having given occasion for the display of some feeling. One of the orators gave considerable offence by omitting all reference to three professors—MM. de Roubaix, Thiry, and Crocq, who have been superseded. M. Crocq's entrance after the speech referred to was a signal for prolonged cheering. The students also manifested their approbation whenever the name of the outgoing rector, M. Rousseau, was mentioned, and subsequently met together to arrange a "manifestation" in his honour.

THE TERM "RHEUMATISM."

IN the course of a paper on Rheumatism, read at the recent Berlin Congress of Naturalists and Physicians, Professor Senator, who adduced evidence to prove that rheumatism is a specific disease, made some remarks upon the popular acceptation of exposure to cold being a cause of disease. (*Deutsch. Med. Woch.*, No. 41.) He said that undoubtedly many painful affections of the locomotor system, many neuralgiæ and paralyses—e.g., facial,—arise from sudden exposure to cold, especially if the surface be heated and bathed in sweat. But the term "cold" should only be applied to cases where the history of such exposure was quite clear, and the diseases produced thereby should be termed "refrigerant" rather than "rheumatic." The use of the words "rheumatism" and "rheumatic" should then be reserved for such cases of disease as are not due to mere cold, but to a special kind of miasmatic infection, like that which excites acute rheumatism—the prototype of rheumatic disease,—and are amenable to specific treatment. Although this may be merely a matter of words, yet, as he truly remarked, correct nomenclature implies correct conceptions of the conditions named.

UNUSUAL COINCIDENCE.

ON the 18th of this month a man and his wife were admitted into St. Thomas's Hospital suffering from acute pneumonia of respectively three and four days' duration. Each was aged thirty-two years. The disease ran an acute course, being little influenced by treatment, and they died at the end of four days within a few hours of each other. At the post-mortem examinations, which were made on the same day, acute inflammation of the right lung was found in each; this had attacked chiefly the base in the case of the man, and the apex in the woman. It would appear that they had left their house, and moved into lodgings only two or three days before the commencement of the disease, on account of the bad smells, making it probable that the disease was of septic origin.

MICROBES OF THE SOIL.

THE value of the action of microbes in the soil would not be questioned by anyone who had given the matter sufficient thought. But to establish a conclusion by means of experiment always commends itself to the scientific mind. M. Laurent has made a series of comparative experiments in order to ascertain the influence of the microbes on vegetable life. Seeds of buckwheat were sown in four different kinds of

mould. In the first flowerpot natural mould was employed, in the second the same earth sterilised and then inoculated with bacteria of the soil, in the third simply sterilised mould, and in the fourth sterilised mould with the addition of chemical manure. Precautions were taken to prevent contamination of the four receptacles (*Journal de Pharmacie et de Chemie*, No. 7). The production of wheat in each of the pots respectively was in the proportion of 94, 96, 23, 66. In all the experiments the third series was inferior to the others. The value of microbes in soil rich in organic detritus seems thereby to be proved.

THE MEDICAL COUNCIL.

THE Medical Council is summoned to meet on Nov. 16th, in its present imperfect form. The direct representatives will not come into office before January, 1887, though the election may be expected to take place about the end of November.

CHOLERA ON BOARD A BRITISH TROOPSHIP.

ON the 24th instant telegraphic information was received from the island of Perim, at the mouth of the Red Sea, to the effect that four deaths from cholera had occurred on board the troopship *Euphrates* since that vessel left Bombay. The *Euphrates* was reported to reach Suez on the 30th, and information as to the action which may have been taken there with regard to the ship and those on board has not yet arrived.

BOWMAN LECTURE.

THE Executive Council of the Ophthalmological Society are to be congratulated on their enterprise in having secured the services and talents of Professor Zehender of Rostock, who will deliver the Bowman Lecture this year at the rooms of the Medical Society, Chandos-street, on Friday, Nov. 12th, at 9 P.M.

NEW ENTRIES.

The following returns arrived too late for publication in our last issue:—

Cambridge University.—116 freshmen, a number which will be increased when the lists of the previous examination are published.

Bristol Medical School.—First year's students, 18; occasional, 1.

FOREIGN UNIVERSITY INTELLIGENCE.

THE following *agrégés* (assistant professors) have been appointed to lecture on their respective subjects in the different French Faculties of Medicine:—*Bordeaux:* M. Moussous, Medical Pathology. M. Pousson, Surgery. M. Ferré, Anatomy and Physiology. M. Nabias, Natural History. *Lille:* MM. Lemoine and Chuffard, Medical Pathology. M. de Lapersonne, Surgery. M. Assaky, Anatomy and Physiology. M. Barrois, Natural History. MM. Lambling and Morelle, Chemistry. M. Thibault, Pharmacy. *Lyons:* M. Weil, Medical Pathology. MM. Rodet and Jaboulay, Anatomy and Physiology. M. Hugonneng, Chemistry. M. Didelot, Physics. M. Florence, Pharmacy. *Montpellier:* MM. Forgue and True, Surgery. M. Gerband, Midwifery. M. Gilis, Anatomy and Physiology. M. Malosse, Physics. *Nancy:* M. Vautrian, Surgery. MM. René and Nicholas, Anatomy and Physiology. M. Guérin, Chemistry. *Paris:* M. Quenu, Anatomy and Physiology. M. Villejean, Chemistry.

Brussels.—The death is announced, at the age of eighty-four, of Dr. E. Lequime, who was for many years Honorary Professor of Clinical Medicine in the University. He edited the *Archives Médicales Belges*, and afterwards *La Belgique Médicale*, and wrote a good deal, especially on cholera. He was officer of the Order of Leopold, and, notwithstanding his advanced age, attended regularly the meetings of the Academy until quite recently.

Dorpat.—Dr. Julius Kennel of Wurzburg has been appointed Professor of Zoology.

Valencia.—Dr. Don Enrique Ferrer y Viñerta, Rector of the University and Professor in the Medical Faculty, has received the Grand Cross of Isabel the Catholic.

The editorship of the *Wiener Medicinische Presse*, which is being given up by Professor Schnitzler, will, at the commencement of the new year, be taken over by Dr. Anton Bum.

A CIRCULAR has been issued by the Local Government Board to all urban and rural sanitary authorities in the kingdom, drawing attention to the provisions of the Contagious Diseases (Animals) Act, 1886, which transfers to that Board the powers hitherto exercised by the Privy Council for making regulations concerning cowkeepers, dairymen, and purveyors of milk, and transfers to the sanitary authorities the duties of making regulations under and enforcing the provisions of the Dairies, Cowsheds, and Milkshops Order of 1885 issued by the Privy Council. The circular reminds the authorities that they are required to register all persons who may carry on the trade of cowkeepers, dairymen, or purveyors of milk, and to look after the lighting, ventilation, cleansing, drainage, and water-supply of dairies.

THE St. Giles's District Board of Works have issued notices to the tenants of some twenty-eight houses in a street off Shaftesbury-avenue, the new thoroughfare recently formed by the Metropolitan Board of Works, requiring them, within seven days from the 23rd inst., to yield up possession of the premises for the purpose of closing the same. This action has been taken by the Board in consequence of the owner of the property, Sir T. H. Brinckman, Bart., having failed to comply with an order issued by the Board to execute certain sanitary works and to make structural alterations in the whole of the premises, to render them fit for human habitation. The order involves the removal of about 500 persons, but the clerk of the Board explains that as soon as the work ordered has been completed the houses may be reoccupied.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of September, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies still maintained the character of the July and August samples, the proportion of organic matter present being again, for river water, exceptionally small. The water drawn from the Lea and distributed by the New River and East London Companies contained even less organic matter than the Thames waters. All the waters were clear and bright on delivery.

PROFESSOR BROWN-SEQUARD brings forward a number of pathological and experimental facts to show that it is an error to suppose that cadaveric rigidity is due to a coagulation of the albuminous principle of muscle. The chief, and sometimes the only, cause of rigor mortis resides in a true muscular contracture, which is a vital phenomenon, although occurring post mortem.

AN Act has received the Royal Assent by which a company is incorporated to take over the existing partial system of waterworks at Sidmouth, and by the construction of further works to give the town and neighbourhood a proper and sufficient system.

IT will be of interest to those engaged in chemical research to learn that the French Senate has adopted a *projet de loi* to institute a prize for the discovery of simple and practical means of determining the presence and quantity in spirituous liquors of other substances than ethylic alcohol, and the proposition now lies with the Chamber of Deputies. The subject of wine adulteration is also under discussion at the Academy of Medicine, which has been officially requested to advise upon the question by the Government.

ON the 22nd inst., Dr. Alexander Dyce-Davidson, Professor of Materia Medica in Aberdeen University, died suddenly in his class-room. The bursting of a bloodvessel in the head was the cause of death. The deceased was a native of Aberdeen, and was forty-one years of age. He was appointed Professor of Materia Medica in 1878.

DR. THOMAS SLEEMAN REED, of Pool, near Camborne, died on the 22nd inst., after a short illness, the immediate cause of death being blood-poisoning, contracted during the performance of an operation on the foot of a miner. The deceased was well known and highly respected throughout the district in which he resided.

THE *London Gazette* of the 22nd inst. contained an announcement that the date of the general order of the Local Government Board prohibiting the importation of rags from Italy, in consequence of the prevalence of cholera in several parts of that country, has been extended from the 1st prox. to April 1st, 1887.

DR. STIRLING, Professor of Physiology in Owens College, commenced on the 26th inst. to deliver a course of eight lectures on the Physiology of Food, Digestion, and Respiration in connexion with the Combe Trust. This is the first time that the Combe Lectures have been delivered in England.

ARGUMENTS signed by Messrs. P. F. Coghlan, J. J. Jackman, and J. B. N. Cane, in favour of increasing the fees of union medical officers for inspecting the buildings to be erected under the Labourers' Cottages Act, have recently appeared in the *Waterford Times*.

A GERMAN Anatomical Society has been founded, with Prof. Kölliker as President and Prof. Bardeleben as Secretary.

THE FELLOWS, MEMBERS, AND COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

HISTORY AND INFERENCE.

FOR many years before his death Mr. J. F. South was known to be engaged in collecting materials preparatory to writing a history of the College of Surgeons, but he did not live even to arrange the mass of facts and papers which he had gathered together. His manuscripts, having been sent to the College of Surgeons, have been edited by Mr. D'Arcy Power, and were published a few months ago under the title of "Memorials of the Craft of Surgery in England," with an introduction by Sir James Paget. It is not our intention at present to criticise either Mr. South's collection or Mr. Power's editing, or to consider to what extent these "Memorials" contribute to the history of surgery in England. What we wish now to do is to make use of some of the data scattered about the pages of these "Memorials," to elucidate some of the questions that have lately been exercising the minds of the Council, the Fellows, and the Members, and which are likely to come prominently to the front again at the general meeting of Fellows and Members of the College, to be held next Thursday. In another column we publish some resolutions which it is intended to move at this meeting, and it will be seen that they refer to the corporate rights of the Members, the academic status of the Fellows, and to the claim of the Fellows and Members to sanction any alterations that may be made in the constitution and relations of the College or in any of its bye-laws.

In order to understand the anomalous constitution of the College as it now exists, it would be necessary to trace the history of the rise and progress of the various companies and corporations which preceded the College, and from which the College is descended. Mr. South's "Memorials" in their present form afford only casual and incidental aid in such a task. But fragmentary as they are, they do furnish sufficient evidence that the exclusive exercise of legislative powers by the Council is a flagrant violation of the fundamental principle of *corporation*.

Sir James Paget, in his brief and apologetic introduction, remarks "it is an error to suppose that English surgeons are, in any fair sense, the descendants of barbers." Happily this is strictly true. But to allege that "the surgeons from whom our College can trace an uninterrupted descent were not barbers" is not, in any fair sense, either historically true or logically consistent. The constitution of the College, as laid down in the Charter of the year 1800, is almost identical with that of the old Corporation of Surgeons, and this was framed on the same lines as the Combined Company of Barbers and Surgeons, which in its turn was merely an extension of the original Company of Barbers. Their principles of government are similar, their later policy and prejudices identical. It betrays a strange misapprehension of the nature and history of these and kindred institutions when a writer usually so accurate as Sir James Paget can suggest that the events recorded in these "Memorials" should be studied "as the history of a *development*"; whereas, on the contrary, they afford a most striking and typical illustration of what Brentano, in his "History and Development of Gilds," designates the *degeneration* of Craft Gilds. A brief survey of the history of these Gilds, of which the Barbers' Company, the Corporation of Surgeons, and the College of Surgeons are ordinary examples, will make this clear.

In the eleventh century the handicraftsmen of Europe were divided into two classes, the bondmen and the freemen. The latter belonged originally to the body of full citizens, and as members of the full Citizens' Gilds, enjoyed under the protection of their Gild immunity from external interference, while the former continued for some time subject to the control of the town or other authority in all matters relating to their trade. Even when the free handicraftsmen were expelled from the full Citizens' Gilds they maintained their independence, and exercised their right to freely elect their own warden. On the other hand, the Craft Gilds, made up of the whilom bondsmen, when obtaining their privileges, were frequently compelled to pay certain imposts in return for their greater independence, and had to consent to have their warden appointed by external authority. These and other considerations make it almost certain that the fraternity of Barbers consisted originally of bondmen who had obtained a smattering of medical knowledge and acquired some dexterity in performing minor surgical operations. Persons of this class swarmed in Europe from the second to the eighteenth century. Oribasius, writing in the fourth century, deplores not less the scarcity of properly educated medical men than the superabundance of pretenders of the medical art, who, though knowing only how to bleed, apply cupping glasses, make scarifications and other *servile* offices (*καὶ τὰ ἄλλα τῆς ὑπηρετικῆς ἐμπειρίας*), did not hesitate to arrogate to themselves the whole of medical practice, to the great detriment or actual destruction of their patients. Of such were the barber-surgeons of the fourteenth and succeeding centuries.

The idea implied in the foundation of all Gilds is that of a brotherhood for mutual help and support. As Wilda aptly remarks, the Gilds were "imitators of the family." The Craft Gilds were, however, more especially interested in the maintenance of the rights, privileges, and customs of the Craft. The essence of these Gilds was its general meetings, at which all the Gildmen met. The president or warden, who was always elected by the whole Gild, summoned the meetings and presided at them, and with the consent of those present enacted ordinances for the regulation of the Craft, and had to see that those ordinances were carried out.

But when in the course of time the Craft Gilds obtained complete independence and authority in all matters relating to the Craft, there soon set in the *degeneration* of Gilds. The fees for membership were raised to an extortionate amount, and the members of the executive body began to entrench themselves behind restrictions, and thus gradually succeeded in transferring the government of the Gilds into the hands of a few of the richer or more influential families. Towards the end of the sixteenth century, instead of the general meetings of all the Gildmen, a "Court of Assistants" sprang up, who governed the Gild and enacted its ordinances, and in the seventeenth century the transfer of the elective franchise from the "Community" to the Courts of Assistants was generally recognised in the Charters. The Courts of Assistants were henceforth elected for life, and as individual members died the "Court" filled up the vacancies without reference to the opinion or wishes of the Community. An oath was also introduced, in which all the members swore to obey the master and wardens and *their* ordinances. This transference of authority from the assembled members of the Gild to the Court of Assistants was, however, not always effected without resistance. It appears, from a pamphlet of the year 1649, mentioned by Brentano, on the "Constitution of the Clothworkers' Company," that a part of the Gild associates, relying on the old Charters of the Gild, claimed for the whole body of the Gild members both the right of electing their wardens and of framing ordinances. In answer to this contention, "this pamphlet endeavours to prove," says Brentano, "with the most arbitrary misrepresentation of the sense and the words, that the word 'commonalty' in the old Charters meant, not the collective body of Gild members, but only the master, warden, and assistants." This was, be it remembered, nearly 250 years ago; but the Council of the Royal College of Surgeons of England, in the year of grace one thousand eight hundred and eighty-six, is not ashamed to resort to a similar subterfuge when eighteen thousand members of the Corporation claim the right to elect the president, to participate in the legislative acts of the College, as well as to supervise and sanction any alterations that may be made in the constitution or relations of the College, or in any of its bye-laws.

This common tendency and this culmination of Craft Gilds may be discovered in the history of the College of Surgeons, as described in Mr. South's "Memorials." In 1308, a warden was elected by the barbers and presented to the Lord Mayor; in 1375, two wardens were "chosen by common assent" of the craft; in 1415, two wardens were chosen "by a majority of the barbers practising surgery"; in 1423, the members of the conjoint Colleges of Physicians and Surgeons were of themselves to choose in prescribed form surveyors, &c.; in 1435, the members of the Guild of Surgeons were instructed to yearly come together on the day of St. Cosmo and Damien to choose four masters for the year "as oold custum was"; in 1461, the charter of Edward IV. provided that the Fellowship of Barbers were to elect two masters, and that whenever need be they were to make honest and lawful assemblies of themselves, and "also ordeyne and make Lawes and Ordenannces"; in 1493, the members of the Combined Fellowship of Barbers and Surgeons were to choose of themselves two wardens. These powers and privileges were confirmed in 1526 by Henry VIII.; but the process of "degeneration" had already begun. The master and wardens not only conducted the ordinary business of the Company, but began to speak of the statutes, ordinances, and oaths as those, not of the Company, but of the "master and wardens and their predecessors." Henceforth the degeneration spread rapidly. In 1604, by an Act of Parliament, the Court of Assistants were to be elected for life, and the master was to be chosen from among the assistants. The ordinary members of the company were more or less excluded from sharing in the management of the company. The Act of 1745, by which the Surgeons' Company—the immediate progenitor of the present College of Surgeons—was instituted, prescribed that the assistants were to be elected for life, the master and wardens were to be elected from the assistants, and "the power of making bye-laws and elections was vested in the master, wardens, examiners, and assistants." Meetings of members were rarely summoned, the last general meeting being, we believe, held in the year 1786.

The Charter of the year 1800, by which the College of Surgeons was founded, secured to the Court of Assistants the sole exercise of both the executive and legislative powers of the College. Great pains were taken to exclude Members of the College from exercising any control over either of these functions. Any loophole that may have been left through the inadvertence of those who inspired the Charter was stopped—*O tempora! O mores!*—by a bye-law framed in the year 1831, to prevent Members from meeting in the College. By a strange irony of fate, it is under the provisions of this bye-law that the meeting next week will take place. This is history; the inference is obvious.

VICTORIA HOSPITAL, BURNLEY, LANCASHIRE.

A CORRESPONDENT has favoured us with the following description of this hospital, which was opened by His Royal Highness Prince Albert Victor a few days ago, and which presents several points of novelty and interest in hospital construction.

The building consists of a central administrative block of three floors, with kitchen and laundry (detached one-storey buildings) at the back. At either side there is a one-storey ward block, connected by a cross-ventilated corridor, behind one of which is the out-patients' department, with access from the back of the site. Each ward block contains two small isolation wards, with a ward scullery and sister's room, and the ward itself, which is for twenty beds, and is circular in form, of 60 ft. internal diameter. The roof is flat, formed of concrete on iron girders, covered with rock asphalte, and is utilised for a convalescent day-room and smoking-room, glazed all round, and surrounded by a promenade 12 ft. wide. Access to the roof is obtained by a spiral staircase, occupying the centre of the ward, and enclosing an annular ventilating flue, which again surrounds a central smoke flue. In this ward are carried out very completely the suggestions of Professor John Marshall, who in this country first advocated this form of ward in a pamphlet "On a Circular System of Hospital Wards" (Smith, Elder, & Co.). The advantages this shape offers are: the absence of corners—there are absolutely none in this ward, as the walls meet both floor and ceiling with a round curve in place of the usual right angle; the greater relative amount of floor space that a given length of wall space in the form of a circle can enclose; the larger amount of light, especially of sunlight, received; the facilities for working; and the greater comfort of the patients, whose fellow-sufferers on the opposite of the ward are so far removed. More equable lighting and heating are readily secured, in this form of ward, while for ventilation the facilities are greater than in buildings of any other shape. The attention of Dr. McKenna of Melbourne, who more than thirty years ago first advocated this system, was drawn to it by his experience of the better results obtained in the treatment of wounded soldiers in the Spanish-American colonies when placed in circular buildings than when in those of the ordinary rectangular form. The floors of the ward are of polished oak; the walls of glazed bricks, pointed with cement; the windows are of British plate glass, made in three sections, the top ones opening inwards on hinges. The ceiling is made of Robinson's cement—a new variety, which can be applied on laths, and it is hoped that in this way a surface physically as smooth, hard, and impermeable as those of the floor and walls has been secured for the ceiling also, and that thus an important advance has been made on the ordinary plaster, which hitherto has been the only material that could be used for this purpose. The ward is lighted by three Wenham lights. The gas is burned in a closed glass chamber, practically outside the ward, and the products of combustion, warming the fresh air on their way upwards, are conducted into the ventilating shaft. The air consumed by the gas is drawn from the ceiling level, warmed on its way down the pipe, thus securing complete combustion and a brilliant white light, while assistance is given to the ventilation of the ward, and all noxious products are removed. For heating the ward three of Mr. Saxon Snell's thermhydric stoves are placed towards the middle of the ward, each connected with the single central smoke flue; but steam, which is used in the laundry and kitchen, and generally for warming water throughout the building, is also to be used for warming the wards. Two rows of graded pipes one inch and a half in diameter are placed along the bottom of the outer wall of the ward; while five such rows surround the central block, except at

the entrance to the staircase. They are worked from the subway, so that any one, or all, may be used as required; and the arrangements are such that they can not only be worked, but even started, without any of the noise hitherto always associated with this means of heating. This was done during the visit of the Prince, steam being introduced into the perfectly cold pipe while he was in the ward without any noise whatever. As the whole of the outside wall can thus be uniformly heated without any disturbance to the patients, it is considered that in this point also a very great advance has been made. In the matter of ventilation, besides the advantages offered by the form of the ward, and the eighteen large windows, each with deep-bottom frame, so as to admit air between the sashes at the middle of the window, Ellison's conical ventilators have been introduced below the windows between the beds; while over each bed, eight feet from the floor, a Sheringham valve has been placed. Around the central block at the ceiling level exit openings for the air have been inserted, the flues from which ascend in the inner wall of the day-room, or sun-room, above, and thence proceed to the upper part of the central ventilating flues. By these the warm air in winter will readily make its way out. The arrangements for ventilation in summer are very perfect. At the floor level eight horizontal flues are provided, which run inwards below the stair to the bottom of the ventilating chamber, which surrounds the central smoke flue. This is annular in form and over thirty feet in height, and contains a series of four coils of steam pipe, each of different size, all worked separately from the subway. By these means fourteen different amounts of heating surface can be obtained in the flue, and it is hoped that even on the warmest summer day the column of air in the ventilating chamber, thirty feet in height, may be warmed to such an extent that it will ascend and draw the air through the ward at a rate sufficient to keep the air pure and the ward well ventilated. In Dr. John S. Billings' work on the Principles of Ventilation and Heating (New York *Sanitary Engineer*), attention is drawn to Professor Troubridge's investigations on the determination of heating surfaces required in ventilating flues, and descriptions are given of the arrangements in the Columbia College and the Johns Hopkins hospital, but in neither of these does there seem to be the necessary power of varying the amount of heating surface according to the external temperature, which is provided in the ventilating flues of the wards of the Victoria Hospital.

HONG KONG.

THE report of the Colonial Surgeon at Hong Kong for 1885 shows it to have been a very unfavourable year for the foreign residents, 3040 in number. The death-rate among them was higher than in any of the nine preceding years, and amounted to 32·56 per 1000 living; among the white troops it was 15·27, and for the rest of the European and American residents, 42·57. We are, however, without any information as to the composition of the latter in regard to age. The high rate of mortality among the troops, greatly above the average of the preceding five years, was due to an outbreak of cholera, which caused half of the deaths. The source of the disease could not be traced. No cases occurred among the police or in the gaol, and only nine were received into the Government Civil Hospital, of which six proved fatal, three being destitute European seamen, and three Chinese. The admissions into hospital of the white troops were 886 per 1000 of the strength, considerably under the average of the preceding five years; those of the black troops were 1173, and the deaths 20·46 per 1000 in an average strength of 173 men. In the police force the death-rate of Europeans was 26·0, of Indians 5·5, and of Chinese 13·2 per 1000; but the numbers employed are too small to justify any positive deductions from these results. The daily average number of prisoners in the Victoria gaol was 530, the admissions into hospital were 255, and 42 were treated in their cells, making a total of 297 cases, of which two died; these numbers give a ratio of 560 cases, and 3·77 deaths per 1000, a result which compares very favourably with the gaol statistics of India. The Tung Wa Hospital, "which is entirely managed by Chinese directors and doctors," continues to furnish an enormous death-rate in proportion to the cases. In 1885 the number of patients treated in it was 1967, and the deaths amounted to 1006. But 383 were moribund on admission; if these be deducted, there still remain 723 deaths in 1684 cases, or 42·9 per cent. "The chief reason for the great mortality in this hospital is that most of the patients when admitted are hopeless cases, the Chinese having a great antipathy to going into hospital at all except in the last extremity, or in case of utter destitution." Mr. Ayres, the colonial surgeon, calls attention to the lamentably defective state of sanitation in Victoria, the subsoil of which "is steadily being poisoned by sewage," and to the difficulty of getting even European house-owners to undertake the necessary sanitary measures of improvement. With regard to quarantine, he believes it to be perfectly useless in excluding cholera, even if it could be properly enforced. "What we have got to do," he says, "is to look at home, and not prepare a hotbed for the reception of disease, as a gardener does for mushrooms." Malarial diseases, fevers and bowel complaints, are the most prevalent, and are followed in many instances by severe anæmia and serious deterioration of health. It is evident there is much required to be done to put the town in a decent sanitary condition. Till that is accomplished, "it is reasonable to expect that the colony will become every year more and more liable to an epidemic of cholera. . . . . A more plentiful supply of water may do something to retard the evil day, but nothing short of a general conflagration in China town is likely to avert it." The colonial medical staff is still kept down at starvation point, and is obviously insufficient for the duties required of it, especially in the event (by no means improbable) of even one of its members falling sick. We trust that the question of an increase to its numbers may receive the favourable consideration of the Colonial Office.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Scarlet Fever at Atherton, by Dr. PARSONS.—The average annual death-rate from scarlet fever between 1876 and 1885 at Atherton, in Lancashire, amounted to 1·40 per 1000 of the population, whereas it was only 0·55 for England and Wales. The total mortality and the infantile mortality are also excessive; and measles as well as scarlet fever tend to recur in an epidemic form every five years. The scarlatina spread immediately under consideration was largely due to the free intercourse between households infected and those as yet uninfected, the parents looking upon scarlet fever as a thing that everyone ought to have, and therefore the sooner it was over the better. The wearing of infected clothing at the mills and participation in large funerals also had a share in producing spread of the disease. The arrangement of the houses, opening as numbers of them do on to common back spaces, and the use of common privies, also tended to the extension of the infection; and badly kept, ill-paved yards, together with inadequate ventilation of houses, were found amongst the insanitary conditions which doubtless tended to increase the severity of the disease. The attempt, during a previous epidemic, to secure isolation in a cottage hired for the purpose failed, although admission was free; but this failure was, perhaps, in part due to the fact that the mothers of sick children were not admitted. It has very generally been found that the admission of mothers is not a serious inconvenience, since they are, as a rule, ready to go out and leave their children directly they find that the isolation arrangements are comfortable. In the absence of isolation, disinfection, though assiduously carried out, proved of little value, and, as Dr. Parsons observes, the reduction of scarlet fever in districts like Atherton must be sought mainly in the instruction and enlightenment of the people themselves. Although there has been some sanitary progress in Atherton during the past ten years, yet numerous defects still remain, and faults of house-drains, together with the mischievous form of midden-privy which has long been such a common source of nuisance in Lancashire, are among the most prominent that call for immediate

action on the part of the sanitary authority. In 1885 there were forty-one deaths from measles and fifty from scarlet fever in a population of 13,500. This is an altogether unnecessary waste of human life.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5947 births and 3371 deaths were registered during the week ending Oct. 23rd. The annual death-rate in these towns, which had declined in the preceding six weeks from 22·6 to 18·9, was last week 19·3. During the first three weeks of the current quarter the death-rate in these towns averaged 19·2 per 1000, and was 1·0 below the mean rate in the corresponding periods of the ten years 1876-85. The lowest rates in these towns last week were 12·7 in Nottingham, 13·9 in Brighton, 14·1 in Huddersfield, and 14·8 in Birkenhead. The rates in the other towns ranged upwards to 24·5 in Manchester, 25·3 in Halifax, 27·4 in Wolverhampton, and 33·5 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined in the preceding six weeks from 1202 to 540, further fell last week to 438; they included 183 from diarrhœa, 83 from scarlet fever, 56 from measles, 49 from "fever" (principally enteric), 35 from whooping-cough, 32 from diphtheria, and not one from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Newcastle-upon-Tyne, Cardiff, and Portsmouth; and the highest in Preston, Wolverhampton, and Halifax. Diarrhœa caused the highest death-rates in Norwich, Bolton, Preston, and Wolverhampton; scarlet fever in Huddersfield, Liverpool, Salford, and Bristol; measles in Wolverhampton and Halifax; "fever" in Sunderland and Plymouth; and whooping-cough in Sunderland and Oldham. The 34 deaths from diphtheria in the twenty-eight towns included 25 in London, 2 in Liverpool, and 2 in Sheffield. Small-pox caused no death in London and its outer ring, or in the twenty-seven large provincial towns. Only 3 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease. The deaths referred to diseases of the respiratory organs in London, which had been 229 and 223 in the preceding two weeks, rose last week to 290, but were 46 below the corrected average. The causes of 69, or 2·2 per cent., of the deaths in the twenty-eight towns last week were not certified, either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Bristol, Newcastle-upon-Tyne, Nottingham, and in three other smaller towns. The largest proportion of uncertified deaths was registered in Sunderland, Birkenhead, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·8 and 19·5 per 1000 in the preceding two weeks, further declined to 18·2 in the week ending Oct. 23rd; this rate was 1·1 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 9·7 and 11·5 in Greenock and Perth, to 19·4 and 21·6 in Aberdeen and Glasgow. The 450 deaths in the eight towns last week showed a further decline of 32 from the numbers in the previous two weeks, and included 25 which were referred to diarrhœa, 17 to scarlet fever, 17 to whooping-cough, 6 to "fever" (typhus, enteric, or simple), 5 to diphtheria, 2 to measles, and not one to small-pox; in all, 72 deaths resulted from these principal zymotic diseases, against 63, 82, and 88 in the previous three weeks. These 72 deaths were equal to an annual rate of 2·9 per 1000, which was 0·4 above the mean rate from the same diseases in the twenty-eight English towns. The deaths attributed to diarrhœa, which had been 22 and 46 in the previous two weeks, declined again last week to 25, of which 11 occurred in Glasgow, 4 in Edinburgh, and 4 in Dundee. The fatal cases of scarlet fever, which had been 21 and 12 in the previous two weeks, rose again last week to 17, of which 9 occurred in Glasgow, 6 in Dundee, and 2 in Edinburgh. The 17 deaths from whooping-cough, on the other hand, showed a further decline from the numbers in the two previous weeks; 12 occurred in Glasgow. The 6 deaths referred to "fever" corresponded with the number in each of the preceding two weeks, and included 3 in Glasgow and 2 in Edinburgh. Three of the 5 deaths from diphtheria were returned in Edinburgh, and both the fatal cases of measles in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had increased in the previous four weeks from 65 to 98, declined last week to 79, and were 4 below the number in the corresponding week of last year. The causes of 53, or nearly 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 23·1 and 22·5 per 1000 in the preceding two weeks, further declined to 20·5 in the week ending Oct. 23rd. During the first three weeks of the current quarter the death-rate in the city averaged 22·0; the mean rate during the same period was 17·0 in London and 17·7 in Edinburgh. The 139 deaths in Dublin last week showed a further decline of 13 from the number in the previous week, and included 10 which were referred to diarrhœa, 7 to scarlet fever, 5 to "fever" (typhus, enteric, or simple), 1 to diphtheria, and not one either to small-pox, measles, or whooping-cough. Thus the deaths resulting from the principal zymotic diseases, which had declined in the preceding five weeks from 39 to 16, rose again last week to 23; they were equal to an annual rate of 3·4 per 1000, the rates from the same diseases last week being 1·9 in London and 2·7 in Edinburgh. The fatal cases of diarrhœa, which had decreased in the previous four weeks from 29 to 11, were 10 last week. The deaths referred to scarlet fever and "fever" exceeded the respective numbers returned in the previous week. Four inquest cases and 2 deaths from violence were registered; and 40, or nearly a third of the deaths, occurred in public institutions. The deaths both of infants and of elderly persons showed a decline from the numbers in the previous week. The causes of 16, or more than 11 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

WAR OFFICE.—Army Medical Staff: Deputy Surgeon-General Randolph Webb has been placed upon temporary half-pay on account of ill-health; Brigade Surgeon John Davidge has been granted retired pay with the honorary rank of Deputy Surgeon-General. The undermentioned Surgeons-Major are granted retired pay, with the honorary rank of Brigade Surgeon:—John M. Fiddes, M.B.; William Morton Harman, M.B.; Surgeon-Major Joseph Fleming, M.D., from half-pay, to be Surgeon-Major, vice T. M. Kirkwood, deceased.

INDIA OFFICE.—The undermentioned Officers of the Staff Corps and Indian Military Forces have been permitted to retire from the Service:—Surgeon-General Michael Cudmore Furnell, of the Madras Medical Establishment, and Brigade Surgeon Charles Kelway Colston, of the Bombay Medical Establishment.

ARTILLERY VOLUNTEERS.—1st Invernes-shire: Murdo Mackenzie, Gent., to be Acting Surgeon.—5th Lancashire: Acting Surgeon Charles Joseph Trimble to be Captain.

ENGINEER VOLUNTEERS.—1st Cheshire: Andrew Stewart, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—1st Fifeshire: Acting Surgeon H. Gordon, M.D., resigns his appointment.—2nd Volunteer Battalion, the York and Lancaster Regiment: Honorary Assistant-Surgeon R. Storrs resigns his appointment.

GREAT NORTHERN CENTRAL HOSPITAL.—The names of some influential gentlemen have been added to the committee of management of this institution and district committees formed in North London. These committees will soon issue an appeal for funds to defray the cost of the new buildings in the Holloway-road, which have just been commenced. We hope that this appeal will be successful, as it is deserving of full support from the many wealthy and charitable inhabitants of these districts, which will be so much benefited by the new hospital. On the 24th inst. a demonstration of the North London Amalgamated Temperance Associations was held in support of the building fund.

Correspondence.

"Audi alteram partem."

"REFORM AT THE COLLEGE OF SURGEONS."

To the Editor of THE LANCET.

SIR,—On Thursday, Nov. 4th, at 3 P.M., the Members of the Royal College of Surgeons of England will again, it is hoped, fill their theatre in Lincoln's-inn-fields with a body of men determined to attain fitting representation on the Council of that corporation. *L'union fait la force*, and no consideration of the personal inconvenience of individual Members should stand in the way of their assembling in their hundreds and ensuring for that meeting a success equally decisive with that of the meetings of last year. For two years and a half has this important question been under the bashful consideration of the rulers of the College, and at last they are asking for a definite plan to be formulated for their better information as to the views of the Members and Fellows. We are told "that it is not desirable to diminish the privileges of the Fellowship by depriving Fellows of the exclusive rights of electing to the Council, and of being eligible to become members thereof"; and yet, while the principle for which we contend is rejected, we are asked to offer up details. Surely by this time the Council of the College knows what the Members are seeking for! If it does not, after the 4th of November it will no longer be able to plead ignorance, for it will then have the main lines of the demand laid before it in a resolution, the terms of which he who runs may read. Let it then reply to this resolution either by an emphatic "No," or by granting the request embodied in the second resolution to be voted for that day—viz., to appoint a committee consisting of members of its own body, of deputies from the Associations of Fellows and of Members, and of independent Fellows and Members of the College, the said committee to draw up the detailed plan prayed for by the Council. Should the Council of the College refuse to grant these requests, which no impartial outsider could stigmatise as lacking in moderation, the Privy Council must be approached by a deputation of Members, including in its ranks, we hope, a contingent of Fellows, and bearing with it the petition, a copy of which your readers will find on p. 43 (advt.) of your issue of the 16th inst., signatures to which are coming in apace. In conclusion, we wish once more to draw the attention of Members of the College to that petition, earnestly begging their signature of the same, the present being a golden opportunity of their obtaining those rights which should never have been denied them.

We are, Sir, your obedient servants,

WARWICK C. STEELE,
W. ASHTON ELLIS, } Hon. Secs.

October, 1886.

DIRECT REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

To the Editor of THE LANCET.

SIR,—Many things were necessarily omitted from the joint letter of Mr. Ker and myself in order to bring it within reasonable length, and I am much obliged to Mr. Hardy for now giving me an opportunity of supplying some of those omissions, and of correcting certain inaccuracies of statement and inference into which he and others have fallen. Going back to what took place at Brighton, there is another, and in my opinion a far juster, way of stating the facts than the one which he has adopted. It is as follows. The principle which I ventured to recommend as one likely to preserve us as a profession from much acrimonious personal discussion, namely, that of a primary recommendation of suitable candidates by a body of men, who, like the council of the British Medical Association, might reasonably be considered as above suspicion of unfairness—was discussed at two successive general meetings, one a very large and the other a very small meeting. At neither was any vote taken on my resolution, so that we are obliged to rely upon general impressions as to the sense entertained of it. My own idea is that the principle commended itself strongly to the very large meeting, and that if a vote could legally have been taken, it would have been adopted, with few if any dissentients. But to the very small meeting—the very, very small meeting, as it may be termed by comparison—it did not appear equally to commend itself; and recognising the inconsistency of allowing an extremely minute and numerically insignificant fraction of the previous day's meeting—which yet by peculiarity of the circumstances would be called the British Medical Association in general meeting assembled—possibly to arrive at a decision directly the reverse of its immensely larger predecessor, I withdrew the resolution, which therefore was never put at all. This having been done, the way was free to take any other course for testing professional feeling on what appeared to others, as well as myself, to be one of the gravest issues ever placed before us (for no one will doubt that our future must be greatly influenced by the character and ability of the representative that we shall return to the General Medical Council), and not being myself a member of the council of the British Medical Association, being untrammeled by office of any kind, and being, moreover, conscious of not having the remotest personal end to serve, I ventured to hope that anything that I might do would at least escape the risk of being supposed to spring from other than an honest desire to promote a good end, and that none of the numerous misrepresentations and imputations that are apt so to degrade the character of popular elections could be attached to it. The rest is soon told. A small conference was summoned by myself and two other gentlemen, who kindly acted with me, and at that conference it was decided to form a committee. My own part in the work must here be told, as the narrative will convince every unbiased mind of the absolutely free character of the committee. A few days only remaining before the day on which it was decided that a general meeting ought to be called, I procured 500 reply post-cards, and finding that the attempt to direct them myself, which I first made, would prevent their being issued at all, I placed them, together with a Medical Directory and a list of members of the British Medical Association, in the hands of a clerk, with no other directions than that they were to be widely distributed, so as to make them as useful as possible, and that they were to be sent by preference to gentlemen who were not members of the British Medical Association, and to those who, as far as could be judged, were in general practice. It was thought that by acting on such a principle the committee, though it would necessarily be a somewhat small one, would be likely fairly to reflect the general feeling of the profession. The result was not unsatisfactory. In two or three days 170 favourable replies were sent, and these, with the answers to circulars that had been previously issued by Mr. Ker, brought the number of the committee up to 350. The method for testing the opinion of these 350 gentlemen was the fairest that could possibly be adopted. It was simply that of asking them to choose three out of eleven gentlemen concerning whose qualifications not a word one way or the other had been said to them. Their judgment was not even biased by what took place at the meeting, as only 10 per cent. (about the usual proportion, I believe) were able to attend. And it is their decision, expressed in a most remarkable and decisive way—for it is certainly very remarkable that such a committee should have arrived at so united an opinion,—that is put before the profession, and not, as Mr. Hardy states, the decision of the three in whose honour they reposed sufficient confidence to entrust them with the duty of counting their votes.

Whether the attempt thus simply and honestly made to gauge the feelings of the profession from the feelings of a small portion of it indiscriminately appealed to will be a successful one or not remains to be seen. From the many hundreds of favourable replies thus far sent in we are encouraged to think that it will, and that the three gentlemen so freely indicated as likely to be of service to the profession will not improbably command as large a measure of support as those who adopted the more usual plan of announcing themselves as candidates and forming their own committees. One circumstance should not be omitted, as it indicates clearly the absence of bias on the part of the committee: it is that one of the three gentlemen finally selected is not even a member of the British Medical Association.

I am, Sir, yours faithfully,

Liverpool, Oct. 25th, 1886. WILLIAM CARTER.

To the Editor of THE LANCET.

SIR,—Dr. Stokes, the chairman of my committee, has received a note from a gentleman friendly to my candidature, but stating that, as "he believes me to be absolutely safe," he will use his third vote in favour of a personal

friend, who he thinks has done good service to medical reform. Will you allow me to point out that if my friends, who are numerous and kind beyond all my desert, act on this view, I shall find myself at the wrong end of the poll. Many fair chances of election have been dashed by this sort of feeling. Allow me, therefore, to ask earnestly for one vote of every member of the profession who thinks that, as a general practitioner, and one having somewhat special knowledge of the working of the Medical Council, I can be of use in it.

As I am writing, let me take the opportunity of removing a doubt which a few of my friends seem to have, and one or two of my kind opponents seem to use a little hardly—viz., that I am not a *bond-fide* general practitioner. It is my pleasure, Sir, to be in active general practice, and, whatever the result of this election, it will be my greatest satisfaction to have had the wide support of my fellow practitioners.

I am, Sir, your obedient servant,

Highbury-place, October, 1886. JAMES GREY GLOVER.

To the Editor of THE LANCET.

SIR,—Having been a complete invalid for many months, I have had little inclination to take part in medical politics, and therefore the circulars emanating from the various candidates for representation in the Medical Council have been hardly looked at; but seeing that the election will shortly be upon us, I take the liberty of asking you to insert the subjoined in favour of two of the candidates who are before us, and to permit me to state the grounds on which I ask my Poor-law medical brethren and others to support them, and in order to prevent the supposition that I favour one more than the other I will take them alphabetically.

My first candidate is Sir B. Walter Foster of Birmingham. This gentleman for the too brief period that he was in Parliament secured by his great ability the ear of the House, and was an active supporter of direct representation. He is in the full vigour of life, active, eloquent, and industrious. He is sure of a seat in the next Parliament, and therefore he is one whom it is desirable in every way to secure as a friend, and being a Liberal is just that kind of representative that would make the dry bones that at present represent the various corporations stir a bit—perhaps reclothe them with flesh.

The second candidate for whom I solicit support is Dr. James G. Glover, of 25, Highbury-place, London. Dr. Glover, to my personal knowledge, has for many years been the advocate of reform in the Medical Council. He was an active member of the Committee on Medical Education which came into existence some years ago at the instance of Sir Andrew Clark, and whilst acting on that committee I had an opportunity of noting not only the very able work he did, but the clearness with which he advocated his views and the tenacity with which he adhered to them. There is, in addition, this fact in his favour—that he is not a person who can or will be swayed by those who represent the interests, and the interests only, of the corporations, to the detriment of the bulk of the medical public.

I am, Sir, yours obediently,

Montague-place, Russell-sq., Oct. 26th, 1886. JOSEPH ROGERS.

To the Editor of THE LANCET.

SIR,—At the present crisis, when for the first time the great body of the medical profession is about to choose its representatives on the General Medical Council, THE LANCET deserves the best thanks of all for the independent position which it has taken up in the matter.

The profession has too long been deprived of representation in the Council. Let us prove by the selection of representatives to be made that we need and merit a yet larger share of representation than the new Act of Parliament confers. If we now choose well, our representatives will hereafter hold the most influential position in the Council. They will represent the profession pure and simple, its scientific and humanitarian aims, and not the separate competing interests of the corporations, to one or more of which we are all of us none the less pleased to be affiliated. I have never been forward in medical politics, but I feel it to be desirable to support in every way independent candidates, such as Dr. Glover, Dr. Richardson, and more especially Dr. Prosser James, whom I have known intimately ever since he first entered my wards at the London Hospital in 1853. His knowledge of all branches of the profession, the position that he holds as a teacher, and the work that he has already done in the cause of reform, render him a specially eligible candidate. Dr. Prosser James is a sound general physician, who knows well from experience the needs both of the general practitioner and of the consultant, and who has done much to draw the veil of mystery from the practice of laryngology, while he has been long distinguished as an explorer in the field of laryngeal medicine since the pre-laryngoscopic times.—I am, Sir, yours truly,

W. J. LITTLE,

Oct. 18th, 1886. Late Physician to the London Hospital.

INFANT FEEDING.

To the Editor of THE LANCET.

SIR,—I have read with some interest the correspondence between Drs. Thurstan and Marshall on this subject. I think both gentlemen are right and both wrong—that is to say, both are too dogmatic, and that in individual cases the views expressed by each of them would be found to be correct.

Thus, I can call to mind many infants which have thriven on half milk and half water, and cannot therefore accept as true so dogmatic a statement as Dr. Marshall makes, that "no baby can certainly be expected to tolerate milk food of such a strength at that age." Nor can I endorse Dr. Marshall's and the widely accepted teaching anent the total unsuitability of farinaceous food, "physiology and experience" notwithstanding. And, first, as regards physiology: On what basis does this teaching rest? On a few isolated experiments on young animals, from which it would seem that the salivary, and chiefly the pancreatic, juices cannot reduce starch into a soluble form! But farinaceous foods contain other principles besides starch; moreover, it remains to be proved that the reduction of starch is necessary to health in infants. And, secondly, as regards experience: it would be just as true to say that experience teaches the value of farinaceous feeding; for few, if any, children of the poorer classes are brought up from infancy onwards without some farinaceous food, and enjoy the most vigorous health notwithstanding. I fear we doctors are all too apt to argue that because certain diets are unsuitable for some children they are unsuitable for all. I have long since given up all belief in "the physiological dyspepsia for starchy food in infants," originally promulgated in this country, I believe, by Dr. Prospero Sonsino, of Pisa, in the *Practitioner*, when the late Dr. Anstie was its editor. A firm believer in this very plausible doctrine, I once acted on it to the best of my ability, and unconsciously shut my eyes to facts everywhere staring me in the face. When my advice not to give foods to infants was always met by the statement that child after child never began to thrive until something over and above milk (breast or otherwise) was given, I began to ponder these things and to argue that I was taking too narrow a view; and when I again studied the question from the physiological standpoint and found on what an insufficient basis this physiological apepsia rested, I began to think that the testimony of sensible matrons, backed by a surrounding of healthy children, was a more reliable guide than the admixture of perhaps faulty physiological observations on animals, and of experience gained very largely from the sick and mismanaged children whom we meet with in our professional avocations.

I agree with Dr. Thurstan's opinion that the addition of a little thickening to milk renders the curd more digestible, probably by causing it during digestion to be more finely and uniformly divided. The reduction of the "caseine to digestible limits" is a troublesome and an expensive process, that cannot be easily carried out in those families which are most likely to require it. It must be remembered too, that it is not so much the quantity of the caseine as its behaviour in presence of the digestive juices which distinguishes human food from cow's milk.

Dr. Marshall's argument that failure with this or that diet depends not on the diet itself so much as on the mode of its administration applies to every kind of feeding. I think he will agree with me that even wholesome breast milk may be given in such quantities, and so frequently, that a child may become ill. How much more strongly does this argument apply to artificial food? His advice to keep

to one dairy rather than to one cow is sound, provided the milk is good. The great fallacy about "one cow" milk is that it is constantly varying in quality. But there is no objection to give such milk, if, after trial, it is found to agree with the child. In country places this is quite a common and, I think, a very wholesome practice. The next best thing is to give an average milk, such as results from mixing together that from a large number of cows. I do not think we need fear "the disturbing influences of menstruation" in either case; for the generality of cows are stocked on the occurrence of the first menstrual period after calving, and, if impregnated, there is of course no recurrence.

The chief ingredient in farinaceous food which is held by authors to be so detrimental to the infantile digestion is the starch, one of the blandest and most universally distributed substances in nature. I cannot and will not believe that the minute quantity of starch which an infant consumes, even if fed entirely on farinaceous food, can bring about the serious mischief which is attributed to this kind of food. There are doubtless infants who cannot digest farinaceous food, just as there are infants who cannot digest milk in any shape. But we must consider these cases as exceptional, and regard them as instances of congenital dyspepsia, and not amenable to ordinary rules. On the other hand, there are infants with whom certain diets seem to disagree. Before condemning the diet, let us be quite sure that the child's stomach is in a condition to digest anything properly. Some months ago I was consulted about a puny infant who could not keep anything on the stomach; all kinds of diet and of drugs had been previously tried, so I decided on the following treatment:—I passed a tube into the stomach, and with a syringe poured in a quantity of warm water containing a little sodium carbonate; then reversing the current I emptied the stomach; this was repeated until the water returned almost pure. A small opiate was then administered; when the child was asleep, some nutrient suppositories were introduced into the rectum. The child was kept asleep more or less for twenty-four hours, and nourished with the suppositories, a few teaspoonfuls of warm water being given from time to time. The effect of this treatment was remarkable, and the progress the child made within a week most gratifying. I have tried the plan in an older and more chronic case, with satisfactory but not such marked results as in the first case. In these cases, it was not merely a question of diet, but of undoing the mischief which previous mismanagement had set up.

I am, Sir, yours &c.,

London, Oct. 18th, 1886. ROBERT WILLIAM PARKER.

TREATMENT BY MASSAGE.

To the Editor of THE LANCET.

SIR,—The arguments advanced by Dr. Sturges in his letter of the 9th inst. are so completely answered by his second communication and by Dr. Playfair's letter that it seems hardly necessary for me to say much more on the subject. Dr. Sturges regards Dr. Playfair as the highest authority on massage in this country; whilst Dr. Playfair himself assures us that he has never seen massage employed, and does not care how it is done. Dr. Playfair's admission that the striking results he has obtained in certain nervous diseases are due in a great measure to the removal of unwholesome domestic surroundings is in itself a convincing proof that he is speaking, not of massage—in which isolation plays no part,—but of the special mode of treatment associated with his name. Dr. Playfair evidently regards massage and the Weir Mitchell treatment as synonymous; whilst, curiously enough, Dr. Sturges now admits that they are not to be confounded. Dr. Playfair laments that massage threatens to become the prevailing folly of the day, but he does not tell us who is responsible for this unfortunate state of affairs—those who maintain that massage, depending as it does on a knowledge of anatomy and physiology, cannot be acquired in less than two years, or those who think that it is a knack like fly-fishing and tennis, to be picked up in "a few easy lessons." He tells us that when first he worked at the subject he never heard of such terms as "pétrissage" and "effleurage." This is, indeed, unfortunate, for had he taken the trouble to turn to the fourth volume of the well-known *Dictionnaire Encyclopédique des Sciences Médicales*, published in Paris in 1871, he would have found a full description of these modes of procedure. Even had he felt himself constrained to confine his attention to English writers, there is no reason why he should not have seen an article by Dr. Kent Spender, of Bath, which appeared in March, 1878, and in which both "pétrissage" and "effleurage" are mentioned by name. Dr. Playfair complains that a simple matter has been rendered complex by the introduction of these terms, but I think the difficulty has arisen from the persistent manner in which recent writers have thought fit to ignore the works of their predecessors.

I am quite sure, as Dr. Sturges says, that it would have given him no trouble to get together a list of authors on massage, and can only regret that he should not have done so, and even made himself acquainted with their writings. I think he is mistaken in supposing that in Great Britain only a languid interest is felt in massage, and that it will never take root in this country. Until recently hundreds of patients were sent abroad to undergo the treatment they could not get here, and would still be unable to obtain it if the primitive modes of training advocated by Dr. Sturges were generally adopted. I fully accept his statement that he has not read my book, although that admission may seem to detract somewhat from the value of the column and a half of detailed criticism with which he favoured me. I am obliged to him for his assurance that he will not stand between me and my readers, although it had not occurred to me that there was any danger in that direction. Dr. Sturges, in his anxiety to defend his "own hospital sisters and nurses"—who were not attacked,—seems for the moment to have forgotten that they are not his only colleagues.

I am, Sir, your obedient servant,

Weymouth-st., W., Oct. 1886. WILLIAM MURRELL, M.D.

To the Editor of THE LANCET.

SIR,—In my reading the other day I came upon the following:—"Sydney Smith, speaking of being shampooned at Mahomed's baths at Brighton in 1840, said 'they have squeezed enough out of me to make a lean curate.'" At that time it was as common for physicians and surgeons to have a list of "rubbers" for their patients as of surgical and monthly nurses. Mr. Grosvenor, the well-known Oxford surgeon, long before this used the art in the treatment of his patients.

I am, Sir, yours, &c.,

Oct. 1886. C. H.

INDUCTION OF LABOUR IN CERTAIN SEVERE CASES OF ALBUMINURIA IN PREGNANCY.

To the Editor of THE LANCET.

SIR,—The case published by Dr. Cullingworth in your issue of Sept. 18th presents many points of interest. The injection under the skin of $\frac{1}{4}$ grain doses of nitrate of pilocarpine once a day for three successive days had no effect whatever, although a freshly prepared solution was used. Now, pilocarpine is a very powerful drug, and if no effect whatever was produced by its administration, I should be more inclined to think with Dr. Murphy that the specimen used was inert, rather than that the disease from which the patient was suffering neutralised its usual effects. It would be interesting to learn whether Dr. Cullingworth proved by experiments that the solution he used was potent. The same remark applies to his subsequent use of the liquid preparation of jaborandi administered internally. No effect whatever was produced, and so jaborandi and its active principle, pilocarpine, were considered useless. I do not think Dr. Cullingworth gave these drugs a proper trial; he ought to have obtained profuse perspirations by the subcutaneous injection of pilocarpine, repeated not at intervals of one day, but of fifteen minutes, for if sweating does not come on directly it will not come on at all.

In a case of pregnancy with albuminuria and convulsions which I published in THE LANCET of April 3rd this year, the first specimen of pilocarpine used did not make the patient sweat, or stop the convulsions, or produce any other visible effect. I believed, and still believe, that the solution used was useless, and did not really contain pilocarpine in an active form; for when I got a fresh solution I at once obtained the physiological effect, and there were no more fits.

Dr. Cullingworth says he used a fresh solution, but I think he will admit that he might have repeated the injections at short intervals until he obtained the sweating. If he could

not make the patient sweat or salivate her with pilocarpine, that would be a very interesting physiological fact; but I apprehend that it is the sweating which does the good in these cases of eclampsia and albuminuria, and indeed Dr. Cullingworth's case would support that view if he had used it in larger doses or at shorter intervals, because no sweating was caused and no good done. But, as it stands, I think this case must be looked upon as one in which pilocarpine was not sufficiently tried, and if that be true the deductions drawn from it in reference to its ecbolic properties must also fall to the ground.

In recommending repeated injections of pilocarpine I must warn anyone who intends to give it a trial should opportunity afford, that it is a very potent drug, and will produce alarming symptoms of cardiac failure if too much is used; in such a case atropia should be at once injected hypodermically.

I am, Sir, yours truly,

St. Thomas's-street, S.E., Oct. 19th, 1886. P. HORROCKS.

TREATMENT OF TUBERCULAR MENINGITIS.

To the Editor of THE LANCET.

SIR,—In the annotations of Oct. 9th I notice a paragraph headed as above, in which 1 to 5 iodiform ointment is said to have produced wonderful effects, in the hands of M. Warfwinge, in the treatment of the above disease. I desire to call your readers' attention to the following points. Tubercular meningitis can only be diagnosed with certainty by post-mortem examination, therefore we must take with great caution any statement of a cure having taken place. It is simulated by typhoid, so as to be with great difficulty distinguished from it. The same may be said of suppurative pericarditis. Tubercular meningitis is an affection of the brain depending upon general acute miliary tuberculosis, and is usually accompanied by a deposit of nodules in and upon the lungs, pleurae, liver, spleen, and kidney. Tubercular meningitis cannot be considered as a disease *per se*, although, owing to the fact that effusion into the ventricles of the brain, when excessive, produces death rapidly, it is convenient to consider separately this phase of tuberculosis. The effusion into the ventricles is caused by occlusion of the vessels by nodular growths of tubercle in their walls. If the iodoform rubbed into the scalp cured tubercular meningitis, then it must cure general miliary tuberculosis, as the head affection is only one of the expressions of this general disease, which it modifies so as to make it hardly recognisable. Thus, in a case of tuberculosis complicated with meningitis and effusion into the ventricles, we have the temperature never above 100°; pulse from 80 to 100, up to the day of death, when it becomes rapid—156 or more, whereas in the acute tuberculosis uncomplicated with effusion, we have a pulse of from 152 to 190, and a temperature of from 103° to 104·5°. In the first case, with meningitis, death takes place in from seven to fourteen days, and the patient is insensible most of the time; in the second, with the same general disease, minus the effusion, we have death occurring at the end of from fifteen to thirty days, and the patient is often sensible to the very last.

I am, Sir, yours truly,

MARTIN OXLEY, M.D.,

Oct. 15th, 1886. Consult. Phys., Liverp. Infirm. for Children.

"FRACTURE THROUGH THE UPPER EPIPHYSIAL LINE OF THE RADIUS."

To the Editor of THE LANCET.

SIR,—Mr. Batterham, writing to THE LANCET of Oct. 23rd, makes a few remarks on a short note of mine which appeared in your issue of Oct. 2nd, on a case in which a fracture through the clavicle and another through the upper epiphysial line of the radius occurred as the result of indirect violence in a child aged nineteen months. The general purport of his letter is to question the accuracy of my diagnosis, and (he himself not having seen the case) to prove that the fracture through the radius was not a fracture at all, but a subluxation of the orbicular ligament. In the first place, I gave no physical signs whatever on which Mr. Batterham could either question the correctness of my statement as to what occurred, or, on the other hand, found a hypothesis of his own. Not thinking it necessary to put down the exact process whereby I arrived at the diagnosis, and in order to economise space, I merely said that such a fracture was diagnosed. The age of the patient (nineteen months) and the nature of the accident (forcible traction on the arm) were both, it is true, against the *probability* of the lesion having been a fracture—that is, supposing the clearer logic of physical signs had been absent,—and if Mr. Batterham will look back he will see that I said as much in my note. The fact that the arm hung down helplessly has nothing to do with the point under discussion, being obviously due to the coexisting fracture of the clavicle. The physical signs, which, as I said, were omitted for the sake of brevity, and on which the diagnosis of the lower fracture was made, were as follows:—Crepitus, which I took to be genuine and not spurious; some slight displacement of the upper end of the shaft, which displacement, having been once reduced, could without the exercise of any force be reproduced; non-participation of the head of the radius in movement communicated to the lower end. Beyond this, there was, when the fracture apparatus was removed, an irregular thickening around the upper end of the bone which I at the time certainly associated with callus. I may perhaps add that Mr. Rich, assistant-surgeon to the infirmary, also saw the case, and after a careful examination entertained no doubt as to the accuracy of the diagnosis. The case, from the fact that a fracture was caused in a child's radius and clavicle by indirect violence, and from the fact that the fracture of the radius occurred, as I believe, through the upper epiphysial line, was doubly interesting and uncommon, otherwise I would not have reported it.

In conclusion, may I offer to Mr. Batterham my thanks for his well-meaning efforts for my better instruction in the diagnosis of fractures of the radius, whilst at the same time I trust he will forgive me if I take the liberty of adhering to my original opinion formed on actual observation of the case.

I remain, Sir, your obedient servant,

ALEX. FOULERTON, M.R.C.S., L.R.C.P.,
Resident Medical Officer, Royal Isle of Wight Infirmary.

Ryde, Oct. 24th, 1886.

THE MEETING OF GERMAN NATURALISTS AND MEDICAL MEN IN BERLIN.

(Continued from p. 706.)

THE sectional meetings could not be so arranged as not to clash with each other, and in reporting the principal work done I have to rely partly on the official record which, in the form of a daily journal, was published at the time, and occupies no less than 450 quarto pages. The whole of this was in the hands of the members a few days after the termination of the meeting, thanks to the indefatigable labours of the publishing committee (Drs. Guttstadt, Guttmann, and Sklarek) and the secretaries of the several sections.

In the Section of Physiology, Cerebral Localisation as shown by the experiments on animals formed the subject of discussion, which led to some unpleasant personal observations. Hitzig maintains his views as to the existence of motor centres in the brain; Goltz, on the other hand, reiterated the views which he had already expressed at the International Medical Congress in London and elsewhere, and especially challenged the observations of Munk on the visual centres situated in the cortex of the occipital lobes. Munk, on the other hand, showed dogs in which the cortex of the occipital lobes had been removed, and whereby the animal was rendered blind, and exhibited the brains of four dogs in support of his views. The discussion was continued by Fritsch, Christiani, Meynert, and others, but led to no practical conclusions. However divergent the results from experimental observations on animals may be, the researches of Ferrier and Horsley clearly demonstrate that for man at least the existence of separate motor centres cannot be disputed. Flesch spoke of some histological researches which showed that those regions of the cortex which had different physiological functions also had different histological structures, and that the various regions showed abrupt changes. This view was combated by Meynert, who alluded to his own observations and those of Lockhart Clarke. Many other papers of great physiological interest were read: such as the Physiology and Histology of the Secretion of Mucus, by Biedermann; and the Reduction of Hæmoglobin in the

Heart of the Frog, by Kronecker. The observations showed that the more quickly the hæmoglobin is reduced, the oftener is the heart irritated, and the warmer it is; but that the reduction is independent of the work done by the heart's muscle or its tension. According to Röhmann's observations on the formation of lactic acid during the activity of the frog's muscle, lactic acid is formed and glycogen diminished. A small part of the lactic acid thus formed in the muscle goes to the kidneys and passes out by the urine; the larger proportion, however, passes into the liver and is there destroyed.

In the Section of Pathology and Morbid Anatomy, Knoll read a paper on the Pressure Variations in the Cerebro-spinal Fluid, and dwelt particularly on the fact that the vessels of the central nervous system remain unaffected when the vessels of the other parts of the body undergo contraction. Professor Chiari spoke of a peculiar form of Orchitis which he observed in persons, chiefly boys, who had died of small-pox. This affection seems to occur during all the stages of small-pox, and is characterised by isolated patches of inflamation, going on to necrosis. Schron gave an account of some observations on the Genesis of the Tubercle Bacillus and its development from Spores, and exhibited a number of preparations. The majority of the members present were, however, very sceptical as to the correct interpretations of the appearances seen in the preparations. Prof. Ponfick read a paper on the Formation of Biliary Colouring Matter in the Circulatory System, and Prof. v. Recklinghausen expressed his belief in the existence of true hæmatogenic icterus, chiefly characterised by the presence of hæmatoidin or bilirubin crystals in the blood. The Formation and Composition of the White Thrombus was the subject of two communications. Löwit's observations were directed chiefly against the views of Eberth and Schimmelbusch on the part which the blood plates play in the formation of the white thrombus. He believes, with Zahn, that the leucocytes form the chief component parts of the thrombus. Weigert followed with a new staining method, demonstrating that the thrombus seen in man contains a large amount of fibrine and leucocytes. The method he employs for staining micro-organisms is Gram's. Instead of placing the preparation in alcohol, after taking it out of iodine solution, he washes it with aniline water, when the fibrine appears deeply stained. Professor Virchow exhibited a number of very interesting preparations, and spoke of general hyperostosis of the skeleton with formation of cyst. The medulla of the bone contained compact bony tissue of ivory-like hardness, islets of fibro-cartilaginous tissue, and cysts. These changes have a close resemblance to those seen in Paget's disease—a view which was also expressed by Recklinghausen. Virchow is inclined to look upon them as arising from enchondromata. Professor Grawitz exhibited museum specimens which were prepared in a peculiar manner. The preparations so preserved kept their colour, size, form, and consistency. They may be kept in this way for some weeks, and the method is therefore very useful for teaching purposes. The following is the composition of the preserving fluid: 150 grms. of sodium chloride, 20 grms. of saltpetre, to 1 litre of water; to this is added 3 per cent. of boracic acid or tartaric acid. The method further recommends itself on account of its cheapness (1 litre costs about 1*d.*). Paltauf exhibited pure Cultivations of a Micro-organism seen in rhinoscleroma (cultivated from the expressed juice in six cases). These organisms resembled the pneumococcus of Friedländer alike in their naked-eye cultivations, their microscopic appearance, and their behaviour when injected into mice. Arning showed some beautiful microscopic preparations of Lepra Bacilli, and demonstrated their presence in the nerves in lepra anæsthetica. He succeeded in preserving the bacilli in putrefying fluids, and found that they increased in quantity when so kept. Neither Arning nor Schottelins succeeded in inoculating animals with lepra.

A brief account of the more important papers in some of the other sections I shall refer to in my next communication.

AT a meeting of the executive committee of the Merthyr and Dowlais proposed hospital on the 23rd inst., it was announced that at least £2000 beyond the subscription of £1000 conditionally offered by Lord Bute towards such an institution had been promised, and the project is now, therefore, fairly afloat.

LIVERPOOL.

(From our own Correspondent.)

THE PREVALENCE OF SCARLATINA.

ALTHOUGH scarlatina prevails to a very considerable extent, the cases are not very severe, and there would be little to regret were it not for its very contagious nature, and the fact that so many cases are treated at home instead of in hospital, where, under the circumstances, they should be. It is to be hoped that the suggestions given in last week's LANCET will be adopted, and that every advantage will be taken of such hospital accommodation as presents itself, and that the sanitary, ventilating, and other arrangements of the hospital are what those of a fever hospital of the present date ought to be.

AN IMPORTANT REGULATION EVADED.

A lodging-house-keeper was, on the 27th inst., summoned before the stipendiary magistrate, and fined 20*s.* and costs for not having reported to the medical officer of health a case of scarlatina which had occurred in his house. The case came under the Common Lodging Houses Act, 1851, and the magistrate considered the regulation a most important one.

THE LOCK HOSPITAL.

Both the male and female wards of this hospital have been recently nearly filled with very severe cases. By a coincidence Mr. Lowndes was able to add confirmation to the other modes of diagnosis in the case of two male patients affected with syphilis, the female from whom they contracted the disease, a prostitute, being also in the hospital. All three were suffering from primary sores and papular eruption. It is another proof of the defect of the volunteer system and of the need of legislation to prevent the spread of syphilis that this woman insisted upon taking her discharge, and resuming her life of prostitution, although she was, as our French *confrères* would term it, "in full bloom of syphilis." Mr. Lowndes has also under his care two females who, though aged respectively twenty and nineteen, are imbeciles, and therefore the men who infected them would, if traced, be liable to a criminal prosecution under the Criminal Law Amendment Act, 1885.

A TERRIBLE DEATH.

An inquest was held at St. Helens, on the 27th inst., by the county coroner, on the body of a man who had been employed in some chemical works. On Saturday, the 23rd inst., he was standing on the edge of a caustic pan when he missed his footing and fell into the boiling caustic. He was got out and taken to the Providence Hospital, where he died the same night. The Government Inspector who had visited the works and made full inquiries, stated that the accident was entirely owing to the dangerous and unnecessary practice adopted by deceased.

Liverpool, Oct. 27th.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

SHERBURN HOSPITAL.

SOME interesting facts relative to this hospital, which is situated about two miles and a half east of Durham, have just been published by the master, the Rev. H. A. Mitton. It was founded about 700 years ago by the well-known Bishop Pudsey, and was designed for the reception of lepers of both sexes. How and at which period Eastern leprosy arose in England may be a matter of doubt, but fortunately it became almost extinct about the middle of the fifteenth century, and the hospital revenues were thenceforward appropriated for the maintenance of poor persons. Mr. Mitton says that in 1500 it was found that "the master, like many predecessors, was pocketing the revenues of the house," and it was not until thirty years later that this and other abuses were swept away. Since the reconstitution of the hospital in 1857 its usefulness has been considerably extended. Part of its revenues is now applied to the maintenance of thirty old men, fifteen of whom are out-brethren, and receive a

pension of 8s. per week. The in-brethren are provided with lodging, food, and clothing, and 4s. per week for minor expenses. The infirmary for patients, erected at a cost of £12,000, is a main feature of the charity. It is a large building, forming with the church one side of the quadrangle, capable of containing, with separate rooms, thirty patients—fifteen of each sex. A resident medical officer superintends these. The third main department in the scheme of the modern dispensation of the charity is the dispensary. Here five days in the week gather together a large company of sick and impotent folk from all parts of the county of Durham—Mr. Mitton says, "waiting patiently for their interview with the skilful and genial medical officer, Dr. Lionel Booth." Four thousand tickets yearly are issued to the clergy and large employers of labour in the diocese, and as these are all used, and as each order brings an average of five visits before it expires, this means about 20,000 medical consultations and medicine in the year. The dispensary is very popular, and was erected at a cost of £2000. It is quite separate from the infirmary. It includes the most complete arrangements for its purpose, and has a long shed for vehicles, which is sometimes filled on the dispensary days. Mr. Mitton says in his very interesting account—of which I merely give you a brief abstract—that "it is scarcely possible to exaggerate the amount of good effected through this department," but he also says that the main difficulty is to exclude those who are not really objects of charity, and it is to be regretted that orders are occasionally given, notwithstanding the express printed directions, which have to be cancelled on presentation.

SCARLET FEVER AT CONSETT.

At the last meeting of the Consett Local Board, the subject of scarlet fever, which has been epidemic in the neighbourhood for some time past, was considered. Dr. George Renton reported why the epidemic had not been got rid of, the causes being principally the reopening of the day schools, and the children being allowed to attend school from infected houses, as well as the funerals of schoolmates who had been stricken down with the fever.

NEWCASTLE.

An inquest has been held here on the body of a widow, sixty-four years of age, who destroyed herself by drinking an infusion of lucifer matches; and another case of attempted suicide by the same means is also reported.—During the fortnight ending Oct. 9th the number of cases of infectious disease reported to our medical officer of health, Mr. H. E. Armstrong, reached the high total of 109; 86 of these were cases of scarlet fever, and 17 of enteric or typhoid.—The umpire appointed in the case of the North-Eastern Railway and the College of Medicine here has awarded to the College authorities £18,664. This, I believe, is nearly twice as much as was at first offered by the company to the College for their building. The Natural History Society has also been awarded £12,830 for its old building in the vicinity of the College of Medicine.

Mr. C. L. Lightfoot and Mr. G. E. Williamson are candidates for the surgeoncy at the Eye Infirmary vacated by the resignation of Dr. Heath. Mr. Williamson is a lecturer at the College of Medicine, and has had for some years charge of the ophthalmic department at the Newcastle Infirmary.

Newcastle-on-Tyne, Oct. 20th.

EDINBURGH.

(From our own Correspondent.)

THE WINTER SESSION.

THE medical classes reassembled for the winter session on Wednesday, Oct. 20th, and the work of the session is now fairly commenced. Several of the professors and lecturers delivered special introductory lectures on the opening day; Prof. Rutherford choosing the Sense of Hearing as a subject, whilst Prof. Grainger Stewart lectured on Pasteur and Hydrophobia, and Mr. Caird, who commences this year a course on Surgery in the Extra-academical School, gave a most interesting *résumé* of the History of the Foundation and Progress of the Edinburgh Royal Infirmary. Mr. Joseph Bell has retired from the staff of the Royal Infirmary, and his place has been taken as Lecturer on Clinical Surgery by Mr. John Duncan. Mr. Duncan's introductory lecture dealt largely with the present state and future development and requirements of the school, and he especially insisted upon the necessity of an increase in the number of teachers of clinical surgery in connexion with the surgical wards of the infirmary.

DIRECT REPRESENTATION IN SCOTLAND.

The canvass for the election of a direct representative of the practitioners of Scotland is in active progress. The three candidates mentioned in a previous letter still hold the field, and there seems little chance that a severe contest can be avoided. On Friday the medical men of Edinburgh were invited to meet Dr. Bruce of Dingwall, who was accorded a very cordial reception by a fairly representative meeting of the profession in this city. No specific vote of confidence was asked for, but a motion was carried unanimously declaring that a fit candidate for the post could only be found in an independent practitioner untrammelled by official connexion with any of the schools or corporations of Scotland. This might apply equally favourably to Dr. Bruce and Dr. Sinclair, but amounted to a vote of no confidence in Dr. Morton of Glasgow. Several of the speakers at this meeting announced their intention of supporting Dr. Bruce, and it became evident that he has a strong following here, as well as in the Aberdeen district.

NEW UNIVERSITY BURSARIES.

It has been announced that Dr. Gunning, late of Rio Janeiro, has placed the sum of £5000 at the disposal of the University authorities as an endowment of eleven medical bursaries of £50 each, which are to be awarded triennially to Bachelors of Medicine or Bachelors of Science of not more than three years' standing, who shall present the best essays on the respective subjects. The subjects are Anatomy, Physiology, Zoology, Botany, Chemistry, Materia Medica, Surgery, Physic, Pathology, Obstetrics, and Public Health. The bursaries are each to be denominated by the name of some teacher of the Edinburgh School distinguished for his eminence in the branch to which each is dedicated; and the names selected corresponding respectively to the subjects in the above list are Munro, Bell, Forbes, Balfour, Black, Christison, Lister, Gregory, Thomson, Simpson, and Alison. The first competition is in April, 1887, in the branches of Anatomy, Chemistry, and Physic; and in the following year the subjects are Physiology, Botany, Surgery, and Pathology. The essays must be handed in before April 30th of each year.

THE RECTORIAL ELECTION.

The nomination of candidates took place last Saturday at a meeting held for the purpose in the old University Buildings. Lord Iddesleigh and Sir Lyon Playfair were nominated; and on a show of hands, the chairman, Mr. C. W. Cathcart, declared the result in favour of Lord Iddesleigh; but, upon the challenge of the chairman of the Liberal committee, appointed Saturday, the 30th, as the date for deciding the contest at the poll.

Edinburgh, October 26th.

IRELAND.

(From our own Correspondent.)

ROYAL UNIVERSITY OF IRELAND.

AT a meeting of Convocation held on the 27th inst., Dr. Whitla was elected a Representative of Convocation on the Senate of the Royal University for the ensuing three years. The other two candidates were Dr. McMordie and Mr. M. J. Farrelly.

DIRECT REPRESENTATION OF THE PROFESSION IN IRELAND.

At a numerously attended meeting of Limerick practitioners, held on Saturday last, the following resolution, proposed by Dr. Fitzgerald and seconded by Dr. O'Connor, was unanimously agreed to:—"That we adopt Dr. Laffan as candidate for the seat on the General Medical Council created by the late Act, and we urge on all provincial practitioners to sustain the man who has not only the support of the leading organ of the profession, THE LANCET, but is the only Nationalist before the constituency, and the only candi-

date whose freedom from connexion with all the interested corporations alone fits him among all the competitors for independently defending the interests of the general practitioners."

DUBLIN WATER-SUPPLY.

The citizens of Dublin are supplied with an excellent water for drinking and dietetic purposes; and repeated analyses have shown that the water-supply is a sound and healthy one. Recently, however, Dr. Reynolds, Professor of Chemistry in the University of Dublin, has drawn attention to apparent insufficient filtration in the water supplied to the citizens. He states that for some time past he has found in it numerous and active living organisms, leading to the conclusion that the care of the filter beds and supervision of supply are among the arts lost to Dublin. Sir Charles Cameron, medical officer of health and city analyst, I am informed, some time since, in making an analysis of some of the water supplied to houses in the Pembroke township, discovered the presence of animalculæ in large numbers, and was of opinion that these organisms arose from the presence of eels, which got jammed in the mains or supply-pipes, and, dying rapidly, putrefied. The screen chamber, he believes, is not an effective filtering apparatus, but the filter beds in co. Wicklow are perfect. If similar beds are constructed at Stillorgan, they would cost about £50,000. Sir C. Cameron considers that the presence of these organisms is purely local.

MEASLES IN WEXFORD UNION.

It was reported that an outbreak of measles existed in Drinagh district, and last week the Local Government Board wrote in reference to this matter, requesting the Board of Guardians to obtain a report from the medical officer on the subject. The statement, however, was inaccurate, as Dr. Pierce, the medical officer, has reported that measles has disappeared from Drinagh, and that the cases which had come under his observation were of a very mild type.

ILLEGAL DISPENSING

and the unauthorised sale of poisons are carried on to a large extent in various parts of Ireland. The attention of the Pharmaceutical Society of Ireland has been called to this matter, and they have instituted prosecutions, obtaining convictions against several persons in co. Meath for these practices. They are determined to put the law in motion in every case that may be brought under their notice. If the Society or some other body were to prosecute pharmaceutical chemists for counter-practice, they would confer a great benefit on medical practitioners, more especially in Dublin.

The President of the Royal College of Surgeons, Ireland, Sir William Stokes, gave a reception last week at his residence in Merrion-square, which was attended by the principal members of the profession practising in Dublin.

The first of the introductories for the present session was given by Professor Fraser at the School of Surgery of the Royal College of Surgeons, Ireland, on Monday, the 25th inst.

Dr. Sweetnam of Schull has been unanimously elected medical officer of Glengariffe Dispensary, in the vacancy caused by the resignation of Dr. P. Cotter.

Collections in aid of the Dublin Hospital Sunday Fund will be held this year on Nov. 14th.

Dublin, Oct. 25th.

ROYAL COLLEGE OF PHYSICIANS.

THE ordinary comitia of the Fellows was held on the 28th inst., Sir W. Jenner, Bart., President, in the chair. Eight gentlemen were admitted to the Membership of the College.

A report upon the so-called Penjdeh Sore by Dr. Owen was received from the India Office.

It having been pointed out that the "Certificate in Hygiene" granted by the College does not verbally fall under the head of diplomas in public health, sanitary science, or State medicine, now registrable, the question of the desirability of a change in title of the certificate was referred to the Council.

The annual accounts were submitted, and the report of the Finance Committee was received and adopted. On the motion of the President it was unanimously resolved to present a copy of the autotype facsimile of Harvey's Prælectiones Anatomicæ to H.M. the Queen, and another to H.R.H. the Prince of Wales. The thanks of the College together with presentation copies of the work, were also voted to Mr. Edward Scott (who had bestowed great care in the difficult labour of transcribing the text), to Sir E. Sieveking, and Dr. N. Moore.

A report from the Committee of Management was received and adopted. It provides for the staff required at the new Examination Hall, and introduces the following important regulations relating to candidates referred at the Second and Third or Final Examination of the Examining Board.

"*Second Examination.*—A candidate referred on the Second Examination is required, before being admitted to re-examination, to produce a certificate that he has pursued, to the satisfaction of his teacher or teachers, in a recognised place of study, his anatomical and physiological studies, or his anatomical or physiological studies, as the case may be, during a period of not less than three months subsequently to the date of his reference.

"*Third or Final Examination*—A candidate referred on the Third or Final Examination is required, before being admitted to re-examination, to produce a certificate in regard to medicine and surgery, of having attended the medical and surgical practice, or the medical or surgical practice, as the case may be, at a recognised hospital, for a period of not less than six months subsequently to the date of his reference; and, in regard to midwifery, a certificate of having received, subsequently to the date of his reference, not less than three months' practical instruction in that subject by a recognised teacher."

Dr. Ord was unanimously re-elected a member of the Committee of Management.

The report of the Examiners for the College Licence was read. It stated that at the recent Final Examination 156 candidates presented themselves, of whom 91 passed.

Dr. George Johnson and Dr. S. O. Habershon were nominated Vice-Presidents of the College for the ensuing year.

Obituary.

ALFRED PESKETT, M.D. ST. AND., M.R.C.S. ENG.

THE inhabitants of the large districts of Leyton and Walthamstow sustained, on Sept. 24th, with much grief, the loss of the longest-established and one of their most able and esteemed practitioners in Dr. Alfred Peskett, who passed away in a severe attack of nephritis, at the age of fifty-eight. Dr. Peskett was the descendant of a long line of medical practitioners, and was himself the son of Dr. William Peskett of Petersfield. He received his early education under a private tutor, and subsequently served the old apprenticeship under his father. He studied afterwards at Guy's, where he was a distinguished student, and at the end of his curriculum in 1850 he graduated M.D. St. Andrews, and obtained the M.R.C.S. Eng. He shortly afterwards commenced practice at Leyton, where he married Miss Jane Collins, only daughter of Robert Collins, M.D., and in this same town he remained till his death an active and trusted practitioner for thirty-five years. He got through an enormous amount of work in his lifetime. He was medical officer of health for Leyton, surgeon to the West Ham Union, and public vaccinator and surgeon to the Leyton and Walthamstow Children's Hospital. In whatever position he found himself, whether as medical officer of health or surgeon to the patients of the West Ham Union, or with his private patients, he always did his work intelligently, assiduously, and to the happiness of all with whom he was brought in contact. Dr. Peskett was a dignified and courteous gentleman. Amidst all his hard and incessant work he found time,

in association with his late friend and colleague Dr. George Yeates, and some of the richer inhabitants of the neighbourhood, to found and start the Leyton and Walthamstow Children's Hospital, which is now in a flourishing condition, and is a perpetual memorial of some of his good and useful work. He was also a friend to most of the literary and social societies of the district, and he had the good fortune to be the intimate friend of nearly all the practitioners of Leyton and Walthamstow. His funeral, which took place at the parish church, in the centre of the district where he had worked so long and so faithfully, was numerously attended by members of the various boards and committees on which he had worked, by most of his medical *confrères*, and by friends and patients from all parts.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on Oct. 21st:

Antrobus, Edmund, Birmingham.
Ayres, Charles James, L.R.C.P. Lond., Grosvenor-road.
Boger, William Henry, Southwark.
Bray, Nicholas James Northey, Aberystwith.
Callender, Eustace Maude, Beckenham.
Colborne, William John, L.R.C.P. Lond., Southsea.
Corbett, Herbert Henry, Bolton.
Craston, Charles Anthony, Wigan.
Doyle, Henry Martin, L.S.A., Melbourne, Australia.
Gee, Frederick William, L.S.A., Regent's-park.
Gidley, Gustavus George, L.R.C.P. Lond., Honiton, Devon.
Gregory, Seth, L.S.A., Calcutta.
Halliwell, Thomas, L.R.C.P. Lond., Birmingham.
Iddon, William Henry, Southport.
Jennings, Edgar, L.S.A., West Hampstead.
Lansdale, William, Chelsham-road.
Marks, Robert John, L.S.A., Clifton, Bristol.
Mast, Theodore Arthur, Buckingham-palace-road.
Morgan, George Frederic Elliott, Sharsted-street.
Scratchley, Henry William, Taunton.
Slack, George Arthur, Uffculme, Devon.
Taylor, Arthur Sneyd, Lewisham-road.
Todd, Frederick, Catford.
Tomlinson, William Henry, L.S.A., Manchester.
Wright, Charles Franklin, L.S.A., Great Yarmouth.

Admitted on the 22nd inst.:—

Boxall, Frank, L.S.A., Horsham.
Blackler, Henry John, L.R.C.P. Lond., West Norwood.
Denton-Cardew, Henry Warnell, Bloomsbury.
Dwyer, Hubert de Burgh, L.R.C.P. Lond., Kensington.
Edsell, George Alfred, L.S.A., Upper Norwood.
Francis, John Arthur, L.S.A., Southsea.
Freeman, Richard Austin, L.S.A., Caledonian-road.
Girling, John, L.R.C.P. Lond., Colchester.
Harston, Lionel de Courcy Eagles, L.R.C.P. Ed., Clapham-common.
Hawkins, Herbert Cæsar, Eastbourne.
Kingsford, Edward Claude, L.R.C.P. Lond., Clapham-common.
Pridmore, Walter George, Junction-road.
Roper, Harold Kennaway, L.R.C.P. Lond., Upper Norwood.
Semple, Henry Frederick, L.R.C.P. Lond., Redlands, Bristol.
Thomas, Frederick, L.R.C.P. Lond., Penarth, Glamorgan.

Admitted on the 25th inst.:—

Boase, Richard Davey, L.R.C.P. Lond., Plymouth.
Cox, James Herbert, L.R.C.P. Lond., Cape Town.
Dewes, Frederick Joseph, L.R.C.P. Lond., South Lambeth-road.
Freeman, Charles Delamark, Marylebone-road.
Kelsall, Charles James Seddon, L.R.C.P. Lond., Bayswater.
Miller, Frederic Richard, West Liss.
Mortlock, Charles, L.R.C.P. Lond., Kensington-park.
Muriel, John, Hallgh, Suffolk.
Nelham, Albert Edgar, Warwick-street.
Popert, Alfred William, L.R.C.P. Lond., Anerley.
Sloman, Frederick, Farnham.
Vernon, Frederick William, L.S.A., Plaistow.
Williamson, Charles Frederick, L.R.C.P. Lond., Mildmay-park.
Wood, George Edward Cartwright, L.R.C.P. Lond., Portobello.

Admitted on the 26th inst.:—

Agnew, Edward Dalton, L.S.A., Soho-square.
Brown, Charles, L.R.C.P. Lond., Wandsworth-common.
Harper, John Maurice, South Hackney.
Ingleby-Mackenzie, Kenneth W., L.R.C.P. Lond., Guilford-st.
Jackson, William E. Gillson, L.R.C.P. Lond., Addington-street.
Lambert, Frederick Samuel, L.R.C.P. Lond., Red-hill.
Macevoy, Henry Thomas, L.R.C.P. Lond., Camden-road.
Manton, John Albert, L.R.C.P. Lond., Wakefield.
Moxon, Alban Henry, South Hackney.
Michell, John Charles, L.S.A., Taunton.
Pearson, Richard, L.R.C.P. Lond., Westbourne-park.
Thomas, Josiah Telfer, L.R.C.P. Lond., Camborne.
Winfield-Roll, Grahame, L.R.C.P. Lond., Brighton.

[In the list of candidates who passed on the 20th inst., for "Ashley" read Ashby.]

UNIVERSITY OF DURHAM.—On the 26th inst. the degree of M.D. was conferred on

Frederick Imeock.

VICTORIA UNIVERSITY.—The following gentleman has been approved for the Degree of Doctor of Medicine:—

Edward Gordon, M.B. Owens College.

The following gentleman has satisfied the Examiners in Part II. of the Final M.B. Examination (First Division), also distinguished in Obstetrics and Diseases of Women:—

O. J. Kauffmann, Owens College.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the October sittings of the examiners the following candidates passed the Examination for the Licence and were admitted Licentiates:—

Gibbon, William, L.K.Q.C.P.I., The Asylum, Carmarthen.
Madders, Charles, L.K.Q.C.P.I., Rathmines.

IRISH MEDICAL SCHOOLS AND GRADUATES' ASSOCIATION.—The dinner of the Association will be held on November 4th at the Café Royal, Regent-street.

THE Hull Sanitary Congress will hold its annual meeting on November 10th. The Archbishop of York will, it is expected, again preside.

THE collection made by the General Post Office towards the Hospital Saturday Fund amounts this year to £341 19*s.*, as against £326 6*s.* 9½*d.* last year.

IT has been decided to amalgamate the Sunderland Hospital for Sick Children with the local infirmary, and to erect a new wing at the latter institution, to be devoted to the separate treatment of children.

THE death is announced at York of Mr. Alfred Hill, L.S.A., L.R.C.P. Ed., at the comparatively early age of thirty-eight. The deceased had been in failing health for some considerable time.

DR. DYKE, an old and esteemed resident in Merthyr Tydvil, well known as medical officer of health for the borough, took his seat on the local bench of magistrates for the first time on the 23rd inst.

ON the 23rd inst. the summonses against several inhabitants of Old Windsor, charging them with having damaged some of the tents erected by the urban and rural sanitary authorities on land near the Thames, were withdrawn.

PRESENTATION.—Dr. Presslie has, on the occasion of his marriage, been presented with a handsome silver drawing-room clock, with ornaments, by the members of the Aberdeen Society of Chemists and Druggists, as a token of their appreciation of his services to the Society.

HARROGATE MEDICINAL WATERS.—On the 22nd inst. the Mayor of Harrogate performed the ceremony of turning on water into a series of reservoirs constructed by the Corporation for the conservation of the various medicinal waters from the springs with which the town abounds.

MUNIFICENT BEQUEST.—By the will of the late Richard Mount, Esq., of Canterbury, the Maidstone Ophthalmic Hospital becomes entitled, on the death of his widow, which has just taken place, to £10,000, whilst a similar institution in London profits, it is stated, to the extent of £30,000.

UNIVERSITY OF CAMBRIDGE.—Notice has been issued that the examinations for the degrees of M.B., B.C., and M.C. will begin as follows: First and Second M.B. Examinations, Dec. 3rd; Third M.B., Part 1, Dec. 14th; Part 2, Dec. 15th, B.C. Examination, Dec. 18th; M.C. Examination, Dec. 17th. The names of candidates for the Third Examination and for the examinations in Surgery must be sent to the Registry (through the Prælectors of their respective Colleges) on or before Wednesday, Dec. 1st, those for the First or Second Examinations on or before Tuesday, Nov. 23rd. The certificates of candidates, accompanied by their postal addresses, should be sent to the Registry not less than seven days before the beginning of the examination for which they are entered. The fees for the examination must be paid to the Registry when the certificates are sent in.

VACCINATION GRANT. — Mr. Walter Hutchinson, public vaccinator of the second district of the Newmarket Union, has been awarded the Government grant for efficient vaccination.

TAUNTON AND SOMERSET HOSPITAL.—The annual report, which was read on the 25th inst. at the general meeting of the governors of this institution, stated that the financial position of the hospital was still in an unsatisfactory state, the expenditure during the past year having exceeded the income by £574.

IT is proposed to hold a meeting of the various scientific societies in Australia and New Zealand in 1888 (the hundredth anniversary of the foundation of the colonies), upon the lines of the British Association meetings, and to form an Australian association for the advancement of science, with similar aims and objects.

CREMATION.—The eighth cremation took place at the crematory at St. John's, Woking, on the 21st inst. The remains were those of an old lady of sixty-four, who died from cancer, and who expressly desired cremation. The ashes weighed 3½ lb., and were removed by two of her sons for burial in the family vault.

MEDICO-PSYCHOLOGICAL ASSOCIATION. — The next quarterly meeting will be held at Bethlem Hospital, St. George's-road, London, on Tuesday, November 9th, at 4 P.M., when Dr. Hayes Newington will read a paper on "What are the Tests of Fitness for Discharge?" In the evening the members will dine together at the Holborn Restaurant.

THE NEW HAMBURG HOSPITAL.—The new town hospital for Hamburg, at Eppendorf, which is now nearly finished, is arranged on the pavilion system, and, exclusive of the buildings for administrative purposes, consists of eighty distinct pavilions; there are, besides, extensive grounds, and when completed this will be the largest and most perfect hospital in Germany.

FOOTBALL ACCIDENTS.—On the 23rd inst., during the progress of a game between the Bolton Wanderers and the West Bromwich Albion, on the ground of the latter, one of the home players had his right leg broken. On the same day, during a match at Bournemouth between Sussex and Hants and Dorset, one of the players in the latter team also had his leg fractured.

RETREATS FOR DRUNKARDS.—The sixth report of the Inspector of Retreats, under the Habitual Drunkards Act, 1879, for the year 1885, was issued on the 23rd inst. It states that during the year two new retreats had been added to the four houses already licensed under the Act, and that the management of the institutions and conduct of the patients had been during the twelve months eminently satisfactory.

THE ESSEX COUNTY ASYLUM.—On the 25th inst., Sir Thomas Barrett-Lennard, Bart., laid the memorial stone of a new block of buildings to be added to the Essex County Asylum, near Brentwood, at a cost of nearly £64,000. The new buildings are designed to accommodate 450 patients, and when they are completed the asylum will offer sufficient accommodation for all the patients in the county.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL.—The following is the result of the competition for the Entrance Scholarships:— £125 Scholarship, open to the sons of medical men, Mr. Alfred J. Lattey; £90 Scholarship, open to students who have passed the Cambridge first M.B., Mr. W. S. Lazarus Barlow; £65 Scholarship, open to students who have passed the Cambridge second M.B., Mr. Guy Budd Courteney; £50 Open Scholarship, Mr. G. Y. Cobb Hunter; £50 ditto, Mr. Francis N. J. MacVicars.

MIDLAND MEDICAL SOCIETY.—At the annual meeting, held on October 6th, the following officers were appointed:—President: Mr. Lloyd Owen. Ex-President: Dr. Holmes Joy. Members of Council: Mr. Messiter, Mr. Bennett May, Mr. Jordan Lloyd, Mr. Harmar, Mr. Ker, Dr. Simon, Dr. Savage, Mr. Chavasse, Mr. Ross Jordan, Mr. Priestley Smith, Mr. W. Thomas, and Mr. Eales. Treasurer: Mr. Garner. Auditors: Dr. Foxwell and Mr. A. F. Clay. Secretaries: Dr. Suckling and Mr. Haslam.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARNLEY, ARTHUR N., L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Wigston District of the Blaby Union.

BEATLEY, WM. CRUMP, M.D. Durh., M.R.C.S., has been appointed Honorary Physician to the Hospital for Sick Children, Newcastle-on-Tyne, vice Dr. J. G. Houseman, resigned.

BENNETT, J. R. A., M.R.C.S., L.S.A., has been appointed Assistant Medical Officer at the Workhouse of the Parish of Birmingham.

CARTER, GRAHAM A., M.D., L.R.C.S., has been appointed Medical Officer of Health for Lichfield.

COTMAN, J. S. E., L.R.C.S., M.R.C.P.Ed., has been appointed Medical Officer for the C Division of the Metropolitan Fire Brigade.

DEANE, EDWARD, L.R.C.P., M.R.C.S., has been appointed Assistant House-Surgeon to the Royal Berks Hospital, Reading.

GRIFFITH, WALTER, S. A., M.B.Cantab., F.R.C.S., has been appointed Physician to the Out-patient Maternity, Queen Charlotte's Hospital.

HARGOOD, WILLIAM (late Clinical Assistant to St. Luke's Hospital), has been appointed Assistant Medical Officer to the Middlesex County Lunatic Asylum, Banstead Downs.

MOSELEY, G. WILKINS, M.B.Edin., has been appointed House-Surgeon to the Royal Hospital for Children and Women, Waterloo-bridge-road, S.E., vice E. H. Freeland, resigned.

SCALLON, E. OLIVER, M.R.C.S., L.S.A., has been appointed Medical Officer for the Templecombe District of the Wincanton Union.

SMART, W. H., M.A., M.B.Cantab., M.R.C.S., has been appointed Resident Clinical Assistant to the East London Hospital for Children, Shadwell, vice B. M. Bond, Esq., resigned.

STADDON, J. R., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Bramford District of the Bosmere and Claydon Union.

TURNBULL, JAMES, M.B., C.M.Ed., has been appointed Medical Officer for the Parish of Dunbar.

Births, Marriages, and Deaths.

BIRTHS.

ALLDEN.—On the 19th inst., at Forest Lodge, Shirley, Southampton, the wife of John H. Allden, M.R.C.S., L.S.A., of a son.

DAVIS.—On the 26th inst., at 14, St. James's-square, Bath, the wife of Robert Davis, of a son.

GOSSE.—On the 24th inst., at Eccleshall, Staffordshire, the wife of Hope Wilkes Gosse, M.R.C.S., of a daughter (stillborn).

HARDWICKE.—On the 22nd inst., at Stour House, Dovercourt, the wife of W. W. Hardwicke, M.R.C.P., L.R.C.S., L.M., of a son.

MARRIAGES.

HILL—FORBES.—On the 21st inst., at St. Jude's, Southsea, Chas. Birnie Hill, Surgeon, Medical Staff, to Augusta Mary, third daughter of Captain C. R. P. Forbes, R.N.

PERN—HEYWOOD.—On the 26th inst., at the Parish Church, Eltham, Alfred Pern, F.R.C.S., to Melville Jane, third daughter of the late Thomas S. Heywood, Paymaster-in-Chief, Royal Navy.

PERRY—FLYNN.—On the 26th inst., at St. Peter's Catholic Church, Woolwich, Allan Perry, Surgeon, Medical Staff, to Agnes Lucinda, second daughter of Lt.-Colonel Flynn, Assistant Commissary-General of Ordnance.

STONHAM—TAYLOR.—On the 21st inst., at St. Paul's Church, Astley-bridge, by the Rev. George Forrester, B.A., Vicar of St. Paul's, Clapham, uncle of the bride, assisted by the Rev. T. Dickinson, Vicar of St. Clement's, Openshaw, also uncle of the bride, and the Rev. L. R. Hearne, Vicar of the Parish, Thomas George Stonham, M.D.Lond., M.R.C.S., of Claremont, Ventnor, to Lilian Isabel, eldest daughter of Rowland Taylor, Esq., Solicitor, and Coroner of Bolton, Lancashire.

DEATHS.

CHAPMAN.—On the 26th inst., at Old Friars, Richmond, Surrey, Fredk. Chapman, M.R.C.S., L.S.A., in his 73rd year.

DAVIDSON.—On the 22nd inst. (suddenly), at Marischal College, Aberdeen, Alexander Dyce Davidson, M.D., Professor of Materia Medica in the University of Aberdeen.

POUT.—On the 22nd inst., at Yalding, Kent, Henry Pout, M.R.C.S., L.S.A., aged 86.

MIDDLETON.—On the 26th inst., at Park-terrace, Didsbury, near Manchester, Thomas Middleton, F.R.C.S., in his 74th year.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, November 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesdays, same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

ROYAL INSTITUTION OF GREAT BRITAIN.—5 P.M. General Monthly Meeting.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Communications will by given by Messrs. S. J. Hutchinson, A. S. Underwood, Walter Coffin, Storer Bennett, J. H. Mummery, A. P. Reboul, W. A. Hunt, &c.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Lawson Tait: The General Principles concerned in the Operation of Removal of the Uterine Appendages.

Tuesday, November 2.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Sainsbury: Tubercular Mass in Supra-renals.—Dr. Sherrington: The Ascending Tract of the Spinal Cord.—Mr. Sydney Jones: Tumour of Palm of Hand.—Mr. Makins: Intra-bursal Fibroma.—Mr. Sutton: Cysts in neighbourhood of Hyoid Bone.—Mr. Treves: Melanosis of Hard Palate.—Mr. Paget: Tumour of Palate.—Dr. S. West: Acute Necrosis of the Fourth Cervical Vertebra. Card Specimens:—Mr. Fenwick: Calculus formed round an Umbrella Ring.—Mr. Shattock: Parts after Removal of the Ovary six months previously.—Dr. Coupland: Genito-urinary and Supra-renal Tuberculosis.

Wednesday, November 3.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesdays and Thursdays, 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department, Mondays and Thursdays, 9.30 A.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; and on Friday, 2 P.M.; and Saturday, 1 P.M.

OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown. Mr. Doran: Papilloma of Fallopian Tube (adjourned debate).—Dr. Champneys: On the Obstetrics of the Kyphotic Pelvis.—Dr. Dakin: Mercurialism in Lying-in Women.—Dr. Herman: Case of Lupous Stricture of Urethra.

Thursday, November 4.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CHARING-CROSS HOSPITAL MEDICAL SOCIETY.—7.45 P.M. Hospitals for Special Diseases and Specialists (Discussion).

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Dr. T. Buzzard: A case of Nerve Lesion.—Photographs illustrative of Epilepsy in Guinea-pigs; also Surgical and Medical cases of interest.

Friday, November 5.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Exhibition of Pathological Specimens.—Dr. Owles: Notes of a case of Epithelioma of the Œsophagus and Stomach.—Mr. Keetley: Further Remarks on the Radical Cure of Hernia by Injection.

Saturday, November 6.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, October 28th, 1886.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Oct. 22	30·04	W.	45	44	...	57	42	...	Foggy
,, 23	30·03	E.	53	52	...	56	44	...	Overcast
,, 24	30·17	N.E.	53	50	...	55	49	·05	Cloudy
,, 25	30·25	E.	51	48	...	53	47	...	Raining
,, 26	30·14	E.	50	49	...	51	47	·04	Overcast
,, 27	29·90	E.	49	47	...	50	47	·06	Overcast
,, 28	30·07	E.	51	50	...	...	48	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

AN APPEAL.

A LARGE number of photographs are, it appears, sent each month to the offices of the *Amateur Photographer* for editorial criticism, and many which are sent in for competition for the various prizes offered by the proprietor of that journal are never claimed. It is proposed for the future to mount these in albums, and distribute them among the poor and to charitable institutions. A distribution of this sort could be much extended by the co-operation of those who have photographs or albums of no further use to them; and for such assistance the Editor of the *Amateur Photographer* has just issued an appeal, which, especially in view of the approaching Christmas, we commend to the kindly feeling of our readers.

Dr. W. S. Griffith.—In a communication to THE LANCET on the treatment of cancer by Chian turpentine, published on Dec. 17th, 1881, Professor Clay stated that the drug he employed was obtained of Messrs. Southall and Barclay, Birmingham.

Mr. W. J. Black is referred to a general notice at the head of this column.

INTUSSUSCEPTION; INFLATION.

To the Editor of THE LANCET.

SIR,—The three cases of intussusception recorded by Dr. Cheadle in THE LANCET of Oct. 23rd are of great interest. The inflator invented by Mr. Lund of Manchester, and recommended by Mr. F. Treves in your issue of Dec. 26th, 1885, p. 1182, greatly facilitates the operation of inflation.

I am, Sir, your obedient servant,

Burt, Londonderry, Oct. 23rd, 1886. E. DONALDSON.

DESTRUCTION OF LOCUSTS.

A PHARMACIST of Hueste in Spain, Don Luis Arias, claims to have discovered a remedy against the devastations of locusts in another insect which deposits its eggs within the head of the locust, the larvæ when hatched causing the death of their host.

Mr. Basil.—Mr. Allen, Marylebone-lane, will no doubt give the information required.

E. has not enclosed his card.

AN ANNOYING EXPERIENCE.

A CORRESPONDENT has forwarded us the particulars of a recent experience, in the hope that their publication will enable other medical men to avoid a similar annoyance. Our correspondent recently advertised for a qualified assistant, and received a reply from a person in a large northern town, styling himself an M.D. The references of the applicant were satisfactory, his name appeared in the Medical Directory for 1885, and our correspondent engaged him. On his arrival, however, he stated that he was not on the Register, and, after some cross-examination, admitted that though he had been registered his name had been struck off in consequence of a conviction for theft, a conviction followed by six months' imprisonment with hard labour. The theft he excused by the statement that an excessive use (or abuse) of chloral had brought on kleptomania. In consequence of this confession our correspondent felt justified in declining his services, giving him a sovereign towards his expenses, for which at the time grateful satisfaction was expressed. Subsequently, however, legal proceedings were taken to recover a month's salary and board, and our correspondent, having no time for litigation and actuated by compassion for the man's unfortunate position, has consented to a compromise. The moral is, the writer thinks, to engage assistants through a medical agent, by whom inquiries as to their antecedents are almost invariably made.

Dr. H. Cane.—We have freely expressed our opinion against an attempt to bind candidates or voters too rigidly in the election of Direct Representatives; but it would be a mistake to condemn three, as it would be to vote for three, in a group. Each candidate should be judged on his own merits, and each registered practitioner should take some pains to ascertain the claims of each candidate, whether he be one of a group, or take an independent position.

Mr. Montague H. C. Pulmer.—The patient can scarcely be expected to pay, but the Accident Insurance Office ought to be charged.

Mr. Jalland (York).—The paper will appear in an early number.

SALICYLATE OF SODA FOR FETID URINE.

To the Editor of THE LANCET.

SIR,—Dr. Fagge, in his valuable work on the "Principles and Practice of Medicine," has the following:—"I believe that the tendency [of urine in paraplegia] to putrefaction may be completely checked by the administration of salicylic acid or some other antiseptic medicine by the mouth." Having resolved to try it, I did so; with what success the following case will show.

Mrs. T——, aged sixty, complained on Oct. 2nd, 1886, of debility, loss of appetite, pain above the pubes, with frequency of micturition and pain in the act. The pulse was weak and slow; the urine alkaline, fetid, and flocculent. The patient was ordered fifteen-grain doses of salicylate of soda, to be taken every four hours in milk. After taking two powders she complained of nausea, pain in the head, giddiness, "buzzing" in the ears, and faintness. The dose was then reduced to seven grains and a half (on Oct. 3rd), and was continued for three days, when it was increased to ten grains every four hours. The urine, on being examined on Oct. 6th, was found to be sweet, and with a decidedly acid reaction. The pain on micturition and tenderness on pressure over the pubes had subsided, the general condition of the patient being decidedly better.—I am, Sir, yours faithfully,

Mexbro', October, 1886. CECIL ROBERTSON, M.B., C.M. Aberd.

THE FOOD OF PARIS.

THE annual consumption in Paris of various kinds of food which can be closely controlled by the registers of the *octroi* was during last year 146,825 tons—an increase of 446 tons over the previous year. Of pork 148 tons had been consumed less, while the consumption of horse-flesh, with a total of 3830 tons, had augmented 337 tons, as compared with 1884; the average price of this last-named commodity is sixty centimes a kilo, while the meat of asses and mules command about seventy centimes. Of poultry and game the aggregate consumption was 25,044 tons—a slight diminution as compared with the year before. The quantity of fish, &c. amounted to 25,631 tons—a slight augmentation, more particularly in oysters. The consumption of butter and eggs has fallen off by nearly 100 tons, which decrease, so far as butter is concerned, may readily be accounted for by the greater use of margarine.

Intros.—Every district medical officer must be registered as qualified to practise both medicine and surgery; but under very special circumstances the guardians may appoint as district officer a medical man registered with one qualification only.

L.R.C.P. & L.R.C.S. Edin., and *M.B.* are referred to the article on Books in our Students' Number.

C. C.—We think a sojourn in Germany, *after* taking the M.B., would be a decided advantage.

SIR DOUGLAS MACLAGAN.

THE Nestor of the Edinburgh School, it is well known, is hardly less proficient as an "all-round shot," whether at the target or on the moor, than as a lyric poet or clinical consultant; and the combination of attributes—in connexion with his receiving the honour of knighthood (so gracefully referred to by Principal Sir William Muir at the opening of the winter session)—has suggested to an *alumnus* and graduate of the same school the following epigram, which appeared in a northern contemporary:—

"Laganide! Tibi nascenti bene dixit Apollo:
'I puer, i musis semper amande meis.
Te civem, medicum, doctorem fama manebit
Plurima, te vatem rite sequetur honos.
Regia te claros inter Schola noscet alumnos,
Majus Athenæo mox meriture decus.
Me duce susciples feliciter arma Salutis,
Civibus ægrotis spe meliora parans;
Inque pharetrato grege conspiciere, timendus
Quels mea cunque affert "certa sagitta" necem.
Auspice te pubes ambabus idonea fiet
Partibus: hæc vitam conficit, illa novat.
Nec, positis curis, thaliarchus amicior ullus,
Seu versus fundes seu sine felle jocos.
Omne feres punctum commiscens utile dulci,
Divitibus gratus pauperibusque simul.
Teque suum decus et tutamen Edina fovebit
Donec iter facias serus in astra redux.'
Sic ait, auratoque humeros velatus amictu
In nemus arcanum Delphicus augur abit."

The following translation gives at least the sense of the original:—

"Maclagan! O'er thy cradle Phœbus smiled:
'On, favoured of my Muses! On, my child!
As patriot, physician, teacher, fame
Winged with thy verse shall waft abroad thy name.
Thy budding gifts the High School shall discern,
Yet prouder bays for Academe thou'lt earn.
With me for guide thou'lt ply the healer's art,
And health unhoped for to the sick impart.
Thy peers in archery thou'lt so outshine,
The foe shall take thy swerveless shafts for mine.
Through thee in Scotia's youth my power shall blend—
My power of death to foe, of life to friend.
And in free festal hour, as host or guest,
Thou'lt charm with lightsome lay, with genial jest.
Of high and humble the beloved alike,
The happy mean of work and play thou'lt strike.
So thee, Edina, as her joy and stay,
Shall cherish till thy late assumption-day!'
Thus spoke the Sun-god; and, in cloud half-seen,
Evanished into Delphi's thickets green."

A Young Practitioner.—It may, like chloroform, be administered on lint.

Dr. J. Miller.—The paper has been received.

USE OF LANOLINE IN MIDWIFERY PRACTICE.

To the Editor of THE LANCET.

SIR,—Permit me to call the attention of your readers to lanoline as a particularly efficient means of reducing the rigidity of the perineum in primiparæ. Owing to its penetrative and softening properties, I find it much preferable to the plan adopted by me of friction with pure lard. Only a few days ago this rigidity was strongly marked in an elderly primipara, where the forceps were required on account of debility on the part of the patient. I was surprised with what facility I succeeded in reducing it so as to enable me to apply the forceps much sooner than I should otherwise have felt justified in doing on account of the danger of severe laceration.

I am, Sir, yours truly,

Belford, Oct. 26th, 1886. C. CLARK BURMAN, L.R.C.P. & S. Edin.

VIPER POISON AND RABIES.

A WRITER in *Los Avisos* mentions that a dog which had been several times severely bitten by different rabid dogs, and had shown no symptoms of rabies itself, had been previously twice bitten by vipers, and suggests the possibility of the poison of the viper having conferred an immunity from rabies.

Mr. Spurgin.—We cannot understand why the judge refused to take the evidence of a scientific witness, as the case was pre-eminently one calling for decision on professional and technical grounds. We trust the matter will not be allowed to rest where it is, or a dangerous precedent will have been created. The honour of the profession, through one of its legally qualified representatives, is at stake.

THE letters of *Dr. Pirie*, *Mr. Easton*, and others must stand over till next week.

UNIVERSITIES' MISSION TO CENTRAL AFRICA.

FOR the last five years the above Mission has maintained a medical mission on the East Coast of Central Africa. As we are informed, the medical mission has done, and is doing, very effective work among the natives there. A fully qualified surgeon sent out by the Medical Guild of St. Luke is at the head of it; and, in addition to attending the European members of the Mission and the natives directly under its charge, he gives medical advice, attendance, and medicine to the natives in the surrounding districts. The Mission is rapidly gaining influence over them; but, in order to carry on the work effectually, a large stock of drugs and medical appliances is required, and the drug fund of the Mission is no longer sufficient to provide these articles in proper amount. An appeal is therefore made for subscriptions, which may be sent, marked "For the Drug Fund," to the Secretary of the Universities' Mission, 14, Delahay-street, Westminster.

Quærens.—The duty of a regular practitioner who is asked to see a case, merely for diagnosis, which is being attended by a homœopath, and in the absence of the homœopath, is simple. He should decline to do so. We do not exist as a profession to gratify curiosity about the nature of disease. We exist to cure it, or at least to treat it. If we are not permitted to do this, or are asked merely to supplement and support a system of therapeutics in which we do not believe, we have no mission.

Subscriber.—The plain name, with "M.B." and "Surgeon," is best.

CHRONIC DYSENTERY.

To the Editor of THE LANCET.

SIR,—Could any of your readers suggest a remedy for chronic dysentery (muciform)? Astringents of every known description, ipecacuanha, Dover's powder, and bael have all been tried in vain. It occurs in a young man, and has now lasted for nearly two years.

I am, Sir, yours obediently,

October, 1886. EUREKA.

Mr. J. Powell.—It would be invidious, as well as difficult, to specify in detail the claims and the blemishes of each candidate. A study of their addresses, in connexion with what can be learnt from the ordinary sources of information, will enable any practitioner to form a fair opinion for himself. Our correspondent has about a dozen or fifteen to choose from. He can only vote for three. The act of selection must be the act of each registered practitioner. We advocate freedom of choice and the preference of general practitioners. The Council is full of the consultant class and the representatives of corporations. Let us hear in the Council the views of men who have to do the hard work of the profession.

Mr. R. Fendick.—75, Park-street, Grosvenor-square, W.

TREATMENT OF OZÆNA.

To the Editor of THE LANCET.

SIR,—I should feel greatly obliged if any of your readers would give me some hints in regard to the treatment of an obstinate case of ozæna which remains from an attack of diphtheria some years ago, and which has hitherto defied all attempts at cure.—I am, Sir, yours faithfully,

Oct. 26th, 1886. SUBSCRIBER.

Mr. Owen Coleman would do well to communicate with the Secretary of the Medical Officers of Schools Society, Dr. Alder Smith, Christ's Hospital.

R. P.—Klein, Micro-organisms and Disease.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Buzzard, London; Dr. Harkin, Belfast; Mr. E. A. Barker, London; Dr. A. Duncan, Glasgow; Dr. Campbell, Alfreton; Dr. Savage, London; Dr. E. P. Thurstan, Southborough; Mr. Thomson, Glasgow; Dr. W. Dale, King's Lynn; Mr. Maynard, Newcastle-on-Tyne; Mr. Pugin Thornton, Canterbury; Mr. H. M. Jones, Liverpool; Dr. Markham Skerritt, Bristol; Mr. E. Cheshire, Birmingham; Dr. Granville Bantock, London; Mr. Robertson, Mexbro'; Mr. Cotterell, Bicester; Mr. J. J. Pringle, London; Mr. Carr-Gomm, London; Mr. Mason, Burton-on-Trent; Mr. A. Haviland, London; Mr. Spreat, St. John's Wood; Dr. Morison, Sues; Mr. Hump, Ruabon; Messrs. Smith and Elder, London; Mr. Cripps, London; Mr. Rowe, Dundee; Mr. Lewis, Wakefield; Mr. Birchall, Liverpool; Mr. Hayward, Manchester; Dr. Campbell, Alfreton; Dr. Tait, Birmingham; Messrs. Simpson and Co., Leeds; Messrs. Dawson Bros., Montreal; Messrs. Witherby and Co., London; Rev. Forster, Worcester; Messrs. Wright and Co., Bristol; Mr. Fearn, Chesterfield; Mr. Russell, Liverpool; Mr. T. K. Clarke, Huddersfield; Dr. H. Cane, Belvedere; Messrs. Squire and Co., London; Dr. Jos. Rogers, London; Mr. Laffan, Cashel; Mr. J. Petrie, Alford; Mr. Foulerton, Ryde; Mr. Palmer, Newbury; Mr. E. Donaldson, Burt; Mr. Christian, Whitworth; Mr. Powell, Newcastle Emlyn; Dr. Bell Taylor, Nottingham; Dr. Park, Glasgow; Mr. P. Kerslake, Barnes; Mr. C. A. Buehl, London; Mr. W. S. A. Griffith, London; Mr. W. A. Ellis, London; Mr. Haslam, Birmingham; Dr. J. Pirie, Glasgow; Dr. Elder, Nottingham; Mr. J. F. Little, Ben Rhydding; Mr. Meere, London; Dr. MacMunn, Seafield; Dr. J. C. Renton, Glasgow; Dr. Carter, Birmingham; Mr. Cuthbert Johnson, Daventry; Mr. J. E. Cooney, London; Mr. Coutts, London; Mr. T. Easton, Stranraer; Prof. Macleod, Glasgow; Mr. C. C. Burman, Belford; Mr. Macdonogh, Twickenham; Messrs. Bates, Hendy, and Co., London; Mr. Addison, London; Mr. Pepler, London; Mr. J. B. Ware, London; Dr. Mackern, London; Dr. Macnab; Messrs. Keith and Co., Edinburgh; Mr. McKenzie, Kurrachi; Messrs. Thompson and Co., Launceston; Mrs. Starling, Portsmouth; Messrs. Lockwood and Co.; Mr. Beach, London; Mr. Fuge, Taunton; Messrs. Bell and Bradfute, Edinburgh; Mr. Wheeler, Manchester; Messrs. Oliver and Boyd, Edinburgh; Mr. Forster, Birmingham; Messrs. Porteous and Co., Glasgow; Dr. Marsden, London; Mr. Reynolds; Messrs. Lee and Nightingale, Liverpool; Mr. Allden, Shirley; Messrs. Reynolds and Branson, Leeds; Mr. Bella, London; Miss Hatton, Notts; Mr. Burdett, London; Mr. Bury, New Barnet; One who has Suffered; Enquirer; Eureka; A Licentiate; Subscriber; J. S., Liverpool; An Old-standing L.K.Q.C.P.I.; J. T.; H. A. B., Willesden; Alpha; Conservative; Editor, "Amateur Photographer"; Lecturer; C. C.; Quærens.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Bolton, Godalming; Mr. Fleming, Glasgow; Mr. Bigg, London; Mr. Hebn, Liverpool; Mr. Chadwick, Oswestry; Mr. Jackson; Mr. Saunders, Manchester; Mr. Ramsden, Halifax; Mr. Booth, Snaith; Mr. Owen, Anglesea; Mr. Davis, Bath; Mr. Williams; Mr. Glanville, Stoke Newington; Mrs. Landale, Bath; Dr. Lepage, Nantwich; Dr. Taylor, Windermere; Mr. Yeoman, Sheffield; Mr. Woodcock, Bradford; Mr. Sallows, Hornsey; Mr. Bethys, Reading; Mr. Richards, Plymouth; W. A. B.; Certainty; W. H. M. J., Manchester; M.D., London; M., Edin.; X. Y. Z.; Colliery; Medicus, Worsley; Beta, Wallsend-on-Tyne; M.R.C.S., London; A. S., Dulwich; Medicus, Nelson; E. T., Preston; B. D. S., Clapham; S. B.; Beta; Alpha, Carnforth; Kilburn; F.R.S.; Doctor.

Boston Independent, Jersey Weekly Press, Liverpool Daily Post, &c., have been received.

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